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SELECTED OCCUPATIONAL WAGES IN MANUFACTURING INDUSTRIES

- VOLUME I -

MASSACHUSETTS

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DES

DIVISION OF EMPLOYMENT SECURITY

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SELECTED OCCUPATIONAL WAGES

IN MANUFACTURING INDUSTRIES

- VOLUME I -

MASSACHUSETTS

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INTRODUCTION

In response to the considerable demand for detailed occupational wage information from employers, educators, planning and research groups, as well as the general public, the Economic Research and Analysis Service of the Massachusetts Division of Employment Security developed a wage survey program. We are pleased to present the results of the first phase of this program manufacturing industries in a comprehensive two volume publication. The report provides information on 81 occupations in the manufacturing sector for which we receive the most requests for information.

The wage survey is published as a service to the residents of the Commonwealth of Massachusetts as well as to interested persons beyond our borders. The wage data can provide meaningful information to employers, counselors, students, and job seekers by:

- Comparing wages for 81 occupations in 15 regions
- Identifing wage ranges for specific occupations
- Tracking the impact of job experience on wage levels
- Comparing your firms wage structure within the labor market
- Making decisions in labor/management negotiations
- Advising individuals in making informed career choices
- Assisting the unemployed in selecting employment

This two volume report presents the findings from the manufacturing industries surveyed between May and August 1985. The second phase of the survey, the service industries, was implemented in the fall of 1985. These results are due later in 1986. The third and final phase of the cycle, the trade and transportation industries, will be published in 1987.

Volume I examines wages for each of the 81 occuaptions on a statewide basis. In addition, descriptive information is presented on the nature of the work and the training requirements for each occupation. Data for each occupation is presented in two table formats. The first table presents summary wage data:

- 3 Skill levels:
  Most Experienced; Typical; Entry Level
- 5 Statistical Measures:
  Mean; Median; Low; High; Intermediate Range

The second table presents an array of wage data responses by:

- 3 Skill levels
- 11 Wage ranges
- 4 Establishment size class categories

In order to facilitate an analysis and comparison of wage levels among all occuaptions, a graphic directory in the front of Volume I depicts the quartile wage ranges for the typical-level worker in each occupation.

Volume II examines wage data for the same 81 occupations on a Regional basis.

- 15 Service Delivery Areas (SDA's)
- 3 Skill levels
- 5 Statistical measures

In conjunction with the tabular data for each occupation, a bar chart ranks the median wages of the typical-level workers for each SDA and the State.

Comparisons among all occupations and SDA's is facilitated by two summary tables that present the median wages for typical-level workers in each occupation in which at least five responses were reported in a SDA. One table cross tabulates the data by SDA by occupation and the second table reverses the format, i.e. occupation by SDA. Since the sample size for a given occupation in a particular SDA can be so small, we urge caution in over-generalizing from this data. The SDA figures are most useful as indicators of broad wage patterns throughout the Commonwealth.

We are especially grateful to the many Massachusetts employers who took time from their busy schedules to provide us with the statistical data vital to the success of this survey. We have been careful to protect the confidentiality of every respondent.

We hope that this study will be very helpful to our users. Your comments are always welcome and appreciated.

To receive additional copies of this publication, please write to:

Massachusetts Division of Employment Security
Economic Research and Analysis Publications
Charles F. Hurley Building, 2nd Floor
Government Center
Boston, Massachusetts 02114

METHODOLOGY

Creating the Sample

DES' Economic Research and Analysis Department requested wage data from a total of 3,572 manufacturing establishments. The sample was derived by:

A. Establishing a "sampling frame" from all manufacturing firms in the second quarter 1984 report (ES 202) of employment and wages covered by the Massachusetts Employment Security Law.

B. Subdividing the frame by three-digit SIC (Standard Industrial Classification) code within the state's 15 SDA's (Service Delivery Areas), and by nine employment-size classifications.

C. Automatically excluding establishments with fewer than ten employees, and automatically including those with more than 250.

D. Randomly sampling the remaining establishments with larger firms having a proportionately higher chance of selection. (However, because the actual size-distribution of firms is skewed toward the smaller end, more sample members are small rather than large firms.)

Responding to the Survey

Once the 81 occupations were selected, the questionaire asked the sample employers to classify their workers into three wage categories:

1. Starting wage for an ENTRY LEVEL worker, who may be considered "probationary", with little or no experience in the occupation and new to the position at the company.

2. TYPICAL wage for an experienced worker, who is able to perform at company standards without direct supervision or guidance.

3. Highest wage for the MOST EXPERIENCED worker, who has attained the highest current rate of pay in his or her job at the company.

After the data were received and compiled, a fourth category -- "ALL Workers" -- was created to further illustrate the results of the survey. Because the "ALL" category summarized responses from all companies for the other three categories, it has a wider dispersal in the intermediate range classification than the "TYPICAL" category. In addition, the "ALL" category's actual high and actual low are equivalent to the actual high for the "MOST EXPERIENCED" workers and the actual low for the "ENTRY LEVEL" workers.

Finally, adjustments were made in several instances when responses appeared atypical for their nominal categories. When one respondent, for example, reported an entry-level welding machine operator earning $14 per hour (while no one else reported even a typical worker earning that much), the $14 wage was moved to the typical category for statistical purposes.

Of the original 3,572 sample firms, 1,380 (or 38.6 percent) responded. Manual editing eliminated 163, leaving 1,217 of the responses (or 30.8 percent) for the final tabulation.

Interpreting the Data

Following a description of each occupation's work content and training requirements, its reported wage levels are detailed by five standard statistical measures:

1. MEAN - The average wage reported in each category (i.e., Entry-Level, Typical, Most Experienced, and All).

2. MEDIAN - The wage rate that divides the wage distribution into two equal parts: the 50th percentile figure. There are as many wages in the sample below the median wage as above it.

3. ACTUAL LOW - The lowest reported wage in each category.

4. ACTUAL HIGH - The highest reported wage in each category.

5. INTERMEDIATE RANGE - The middle 50 percent, or the second and third quartiles, of the sample distribution. Twenty-five percent of the wages lie below the low end of this range, and 25 percent above the high end.

The results reflect the actual responses received for each occupation and are not weighted by the number of individuals holding that job in each firm. Therefore, the statistical measures reflect establishments rather than individuals. The "ALL" category measures average overall wages in an occupation, but the "TYPICAL" category is a better indicator of wage rates for the average worker.

The second part of the wage analysis for each occupation examines the percentage distribution of salaries by experience category and by company size. The monetary denomination used, as well as the size of the range and step, reflect the salary standards in each major occupational area. For example:

Occupational Category	Denomination	Beginning Wage	Step	Ending Wage
Managerial	Yearly	under $15,000	$5000.00	$60,000 & over
Professional, Paraprofessional & Technical	Yearly	under $15,000	$2500.00	$37,500 & over
Physical Scientists	Yearly	under $25,000	$2500.00	$47,500 & over
Sales	Weekly	under $200.00	$25.00	$425.00 & over
Clerical	Weekly	under $200.00	$25.00	$425.00 & over
Service	Hourly	under $4.00	$0.50	$8.50 & over
Supervisors and Managers/ Service	Hourly	under $7.00	$1.00	$16.00 & over
Production	Hourly	under $5.00	$1.00	$14.00 & over

The analysis in Volume II for each occupation looks at the same statistical measures by region (Service Delivery Area) and experience level.

A summary SDA section compiles the median wages for typical-level workers in each occupation, for every SDA in which at least five responses in that position were reported. Because the sample size for a given occupation in a particular SDA can be so small, the reader should use caution in generalizing from this data. The SDA figures are more useful as indicators of broad wage patterns throughout the Commonwealth.

DIRECTORY

[Key:] Low 25% Median 75% High

Wage Range for Typical Category

Page

MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS

Financial Managers. 54

$15,600 $30,000 $35,000 $43,000 $75,200

General Managers and Top Executives. 58

$14,000 $30,000 $40,000 $50,585 $190,000

Industrial Production Managers. 74

$14,000 $25,000 $31,200 $40,000 $100,000

PROFESSIONAL, PARAPROFESSIONAL, AND TECHNICAL OCCUPATIONS

Accountants and Auditors. 16

$11,000 $22,000 $25,000 $30,000 $54,000

Buyers and Purchasing Agents. 24

$7,500 $20,000 $24,000 $28,000 $50,000

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Computer Programmers 30

$15,000 $21,684 $25,000 $29,000 $43,900

Drafters 40

$10,400 $17,000 $20,000 $23,000 $40,000

Electrical and Electronic Engineering Technicians & Technologists 46

$11,400 $19,300 $22,000 $25,000 $35,000

Electrical and Electronic Engineers 48

$16,640 $30,000 $34,872 $38,000 $52,000

Industrial Engineering Technicians & Technologists 70

$12,771 $20,000 $24,000 $28,000 $35,000

Industrial Engineers 72

$15,000 $26,000 $30,000 $34,112 $60,000

Mechanical Engineering Technicians & Technologists 104

$13,000 $18,000 $20,500 $24,000 $40,000

Mechanical Engineers 106

$12,000 $27,800 $30,910 $35,000 $59,880

Physical Scientists 116

$20,984 $30,000 $34,560 $44,200 $59,900

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Programmers - Numerical, Tool, and Process Control 138

$12,480 $20,800 $24,900 $30,000 $38,000

Systems Analysts 160

$20,000 $26,976 $31,200 $35,000 $47,280

SALES AND RELATED OCCUPATIONS

Sales Representatives, Except Retail and Service 144

$145 $400 $500 $650 $1663

CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS

Billing, Cost, and Rate Clerks 20

$150 $235 $260 $295 $481

Bookkeeping, Accounting, and Auditing Clerks 22

$150 $260 $298 $337 $700

Computer Operators 28

$173 $270 $300 $331 $519

Data Entry Keyers, Except Composing 36

$180 $231 $260 $288 $442

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Data Keyers, Composing 38

$200 $260 $298 $335 $406

General Office Clerks 60

$140 $220 $240 $275 $560

Order Clerks - Materials, Merchandise, and Service 112

$163 $231 $260 $300 $519

Payroll and Timekeeping Clerks 114

$133 $240 $275 $310 $518

Procurement Clerks 134

$175 $240 $261 $300 $450

Production, Planning, and Expediting Clerks 136

$173 $275 $320 $385 $760

Receptionists 142

$150 $220 $240 $265 $430

Secretaries 146

$150 $250 $288 $326 $585

Stock Clerks - Stockroom, Warehouse, and Storage Yard 150

$151 $234 $260 $302 $489

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Supervisors and Manager/Supervisors - Clerical Administrative Support 154

$128 $315 $392 $462 $889

Switchboard Operators 158

$150 $228 $250 $273 $382

Traffic, Shipping, and Receiving Clerks 164

$142 $240 $275 $320 $615

Typists 170

$163 $220 $240 $267 $375

Typists, Word-Processing Equipment 172

$175 $240 $260 $300 $378

SERVICE OCCUPATIONS

Guards and Watch Guards 66

$2.95 $5.34 $6.49 $7.23 $10.58

Janitors and Cleaners, Except Maids and House Cleaners 80

$3.35 $5.00 $5.87 $6.71 $11.82

Supervisors and Managers - Service 156

$4.63 $8.89 $11.00 $12.93 $25.00

PRODUCTION, CONSTRUCTION, AND MAINTENANCE OCCUPATIONS

Assemblers and Fabricators (except Machine, Electrical, Electronic, and Precision). . . 18

$3.60 $5.00 $6.00 $7.00 $10.63

Combination Machine Tool Operators and Tenders, Metal and Plastic. 26

$4.00 $6.00 $6.81 $8.00 $10.56

Computer Service Technicians. 32

$7.00 $8.90 $10.16 $11.88 $13.80

Construction Trades and Extractive Occupations, Except Material Moving. 34

$5.77 $8.59 $10.00 $11.00 $12.19

Drill and Bore Machine Tool Setters and Set-Up Operators. 42

$3.75 $6.75 $8.00 $9.03 $13.54

Electrical and Electronic Assemblers. 44

$4.10 $6.00 $6.75 $8.00 $14.00

Electrical and Electronic Equipment Assemblers - Precision. 50

$4.40 $6.50 $7.25 $8.79 $12.51

Electromechanical Equipment Assemblers - Precision. 52

$4.00 $6.00 $7.04 $8.29 $11.00

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Freight, Stock, and Material Movers - Hand. 56

$3.64 $5.25 $6.00 $7.43 $11.73

Grinding, Lapping, and Buffing Machine Tool Setters and Set-Up Operators. 62

$4.38 $6.75 $8.00 $9.00 $14.01

Grinding and Polishing Workers - Hand. 64

$3.60 $6.00 $7.50 $8.69 $13.94

Hand Packers and Packagers. 68

$3.50 $4.70 $5.40 $6.57 $12.65

Industrial Truck and Tractor Operators. 76

$3.75 $6.00 $7.34 $8.30 $12.32

Inspectors and Related Occupations. 78

$3.45 $6.00 $7.20 $8.50 $18.61

Lathe and Turning Machine Tool Setters and Set-Up Operators. 82

$4.10 $7.25 $8.52 $9.70 $14.01

Machine Assemblers. 84

$3.75 $6.00 $8.13 $9.70 $10.85

Machine Feeders and Offbearers. 86

$3.50 $5.00 $5.93 $7.12 $12.52

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Machine Forming Operators and Tenders, Metal and Plastic 88

$3.95 $6.00 $7.00 $8.41 $12.25

Machine Setters, Operators, and Tenders - Printing 90

$3.50 $6.50 $8.00 $9.44 $15.00

Machine Setters, Operators, and Tenders - Textiles 92

$3.75 $4.90 $5.60 $7.00 $12.50

Machine Setters, Operators, and Tenders - Wood 94

$3.71 $5.50 $6.50 $8.00 $15.55

Machine Tool Cutting Operators and Tenders 96

$3.85 $5.95 $6.50 $8.00 $12.15

Machinists 98

$3.75 $8.13 $9.25 $10.41 $15.30

Maintenance Repairers, General Utility 100

$4.50 $7.14 $8.50 $9.66 $14.01

Mechanic and Repairer Helpers 102

$4.00 $6.10 $7.10 $8.45 $14.52

Mechanics, Installers, and Repairers 108

$4.00 $7.50 $8.75 $10.00 $16.06

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Millrights 110

$5.50 $8.00 $9.50 $10.56 $17.31

Plant and System Occupations 118

$4.50 $6.75 $8.31 $9.50 $13.80

Precision Assemblers 120

$5.00 $6.72 $7.56 $9.00 $14.00

Precision Instrument Makers 122

$5.80 $7.40 $8.90 $11.54 $26.24

Precision Printing Workers 124

$3.88 $6.75 $8.00 $9.75 $15.00

Precision Textile, Apparel, and Furnishings Workers 126

$3.75 $4.50 $5.60 $8.02 $15.00

Precision Tool Grinders, Filers, and Sharpeners 128

$3.75 $7.54 $8.55 $9.70 $13.54

Precision Woodworkers 130

$4.00 $6.00 $7.50 $9.50 $16.55

Press and Press Brake Machine Setters and Set-Up Operators 132

$4.00 $6.75 $7.83 $9.00 $14.56

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Punching Machine Setters and Set-Up Operators. 140

$3.85 $6.00 $7.00 $8.17 $14.56

Sheet Metal Workers. 148

$4.50 $7.84 $8.79 $10.50 $18.15

Supervisors - Production and Operating Workers. 152

$4.20 $8.25 $10.50 $12.50 $25.00

Tool and Die Makers. 162

$5.00 $9.00 $10.33 $11.75 $19.23

Truck Drivers, Heavy or Tractor Trailer. 166

$5.00 $7.00 $8.00 $10.00 $16.82

Truck Drivers, Light - Including Delivery and Route Workers. 168

$3.50 $6.00 $6.97 $8.01 $12.75

Welding Machine Operators and Tenders. 174

$3.75 $6.75 $8.00 $9.25 $17.75

Welding Machine Setters and Set-Up Operators. 176

$3.75 $7.77 $8.79 $10.00 $13.65

OCCUPATIONS

ACCOUNTANTS AND AUDITORS

Nature of the Work:

ACCOUNTANTS AND AUDITORS are both responsible for providing and verifying financial and budgetary information crucial to decision making for individuals, management, and government. They specialize in such areas as cost accounting, tax accounting, budget and forecast accounting, and systems analysis accounting. In general, they assist management by drawing up budgets and policy recommendations based on matching company goals to available resources.

Auditors, who have generally the same background as accountants, perform oversight on the financial statements of individuals and firms as well as the work of private accountants. The internal auditor examines both financial and non-financial activities of his or her own firm. Public and government accountants also serve as auditors. Public accountants review statements for individuals and firms. Government accountants/auditors perform these same functions for government agencies and also review firms that are subject to government regulations.

Training Requirements:

Almost all employers require a bachelor's degree in accounting or business management. Many employers prefer those with a master's degree in accounting. Long experience in the field yields a definite advantage, and experience with computers and data processing systems is increasingly sought. Certified public accountants (CPA's) hold a certificate from the Massachusetts State Board of Public Accountancy, upon passing a rigorous four-part examination. Accountants must meet education and experience requirements in order to be eligible for the examination. Those who wish to teach usually must hold a doctorate and/or CPA certificate.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$26,410	$25,000	$10,000	$70,000	$20,280	$31,000
Most Experienced	31,844	30,500	15,000	70,000	26,000	36,200
Typical	26,278	25,000	11,000	54,000	22,000	30,000
Entry Level	20,722	20,000	10,000	48,000	17,300	24,120

STATEWIDE

ACCOUNTANTS AND AUDITORS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	3.1	8.0	9.2	13.8	10.3	15.6	7.6	12.1	5.1	5.9	9.3	953
500+	2.4	2.4	12.7	8.0	14.3	14.3	8.7	11.1	7.9	7.9	10.3	126
250-499	2.1	5.3	9.6	16.0	9.6	14.9	12.8	9.6	7.3	5.3	7.5	94
100-249	2.1	7.7	5.9	15.7	10.4	17.4	8.4	12.9	5.2	5.9	8.4	287
0-99	4.3	10.3	10.3	13.7	9.2	15.0	5.6	12.3	3.8	5.4	10.1	446
						MOST EXPERIENCED WORKERS						
ALL	0.0	1.2	2.5	5.3	6.5	16.5	9.4	17.1	9.4	10.3	21.8	321
500+	0.0	0.0	0.0	2.4	2.4	11.9	16.6	9.5	11.9	16.7	28.6	42
250-499	0.0	0.0	3.3	3.2	3.2	16.1	12.9	19.4	9.7	16.1	16.1	31
100-249	0.0	0.0	1.0	2.1	9.4	17.7	12.5	14.6	11.5	10.4	20.8	96
0-99	0.0	2.6	4.0	8.6	6.6	17.1	4.6	20.4	7.2	7.2	21.7	152
						TYPICAL WORKERS						
ALL	0.3	6.6	7.2	12.6	15.7	18.9	9.6	13.5	4.5	6.6	4.5	333
500+	0.0	2.4	4.9	0.0	29.3	17.1	7.3	19.5	9.8	7.3	2.4	41
250-499	0.0	3.1	3.1	12.5	18.7	18.8	21.9	3.1	12.5	0.0	6.3	32
100-249	0.0	5.0	2.0	19.0	14.0	23.0	7.0	16.0	3.0	7.0	4.0	100
0-99	0.6	9.3	11.9	11.9	12.5	16.9	9.4	12.5	2.5	7.5	5.0	160
						ENTRY LEVEL WORKERS						
ALL	9.7	16.7	18.7	24.1	8.4	11.2	3.3	5.0	1.3	0.3	1.3	299
500+	7.0	4.6	32.6	20.9	11.6	14.0	2.3	4.7	2.3	0.0	0.0	43
250-499	6.3	12.9	22.6	32.3	6.5	9.7	3.2	6.5	0.0	0.0	0.0	31
100-249	6.6	18.7	15.4	26.3	7.7	11.0	5.5	7.7	1.1	0.0	0.0	91
0-99	13.4	20.1	15.7	21.6	8.2	10.5	2.2	3.0	1.5	0.8	3.0	134

ASSEMBLERS AND FABRICATORS - EXCEPT MACHINE, ELECTRICAL, ELECTRONIC, AND PRECISION

Nature of the Work:

ASSEMBLERS AND FABRICATORS are workers who put together the parts of manufactured articles. In other words, they assemble and /or fit together parts to form complete units or subassemblies. Sometimes hundreds of assemblers work on a single product. These workers perform their job at a bench, conveyor line, or on the floor, and they must complete their job within the time it takes the item to pass their work station.

Training Requirements:

Employers seek workers who can do routine work at a fast pace. A high school diploma is helpful but usually not required.

For some types of assembly jobs, applicants may have to meet special requirements. Some employers look for applicants with mechanical aptitude and prefer those who have taken vocational school courses such as machine shop. Good eyesight, with or without glasses, may be required for assemblers who work with small parts. Most kinds of assembly work can be taught to inexperienced people in a few day or weeks.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$6.15	$5.89	$3.35	$12.25	$4.75	$7.21
Most Experienced	7.27	6.98	4.00	12.25	6.00	8.43
Typical	6.17	6.00	3.60	10.63	5.00	7.00
Entry Level	4.98	4.60	3.35	9.75	4.00	5.70

STATEWIDE

ASSEMBLERS AND FABRICATORS - EXCEPT MACHINE, ELECTRICAL, ELECTRONIC, AND PRECISION

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	29.2	22.0	20.0	11.3	8.1	4.7	3.4	0.9	0.4	0.0	0.0	469
500+	18.6	18.5	7.4	18.5	18.5	3.7	11.1	3.7	0.0	0.0	0.0	27
250-499	17.8	24.4	22.2	15.6	4.4	15.6	0.0	0.0	0.0	0.0	0.0	45
100-249	32.8	20.2	22.7	11.7	5.0	1.7	4.2	0.0	1.7	0.0	0.0	119
0-99	30.6	22.6	19.8	9.7	9.0	4.3	2.9	1.1	0.0	0.0	0.0	278
						MOST EXPERIENCED WORKERS						
ALL	6.3	18.1	26.5	13.6	16.1	8.4	7.1	2.6	1.3	0.0	0.0	155
500+	11.1	11.1	11.1	11.1	33.4	0.0	11.1	11.1	0.0	0.0	0.0	9
250-499	0.0	13.3	26.7	33.3	6.7	20.0	0.0	0.0	0.0	0.0	0.0	15
100-249	7.7	20.5	30.8	15.4	7.7	2.5	10.3	0.0	5.1	0.0	0.0	39
0-99	6.5	18.5	26.1	9.8	19.6	9.8	6.5	3.2	0.0	0.0	0.0	92
						TYPICAL WORKERS						
ALL	21.1	28.6	23.0	13.7	6.2	4.3	3.1	0.0	0.0	0.0	0.0	161
500+	12.5	12.5	12.5	25.0	12.5	0.0	25.0	0.0	0.0	0.0	0.0	8
250-499	0.0	40.0	33.3	6.7	0.0	20.0	0.0	0.0	0.0	0.0	0.0	15
100-249	26.8	29.3	17.1	17.1	4.9	2.4	2.4	0.0	0.0	0.0	0.0	41
0-99	22.7	27.8	24.7	12.4	7.2	3.1	2.1	0.0	0.0	0.0	0.0	97
						ENTRY LEVEL WORKERS						
ALL	60.8	18.9	10.5	6.5	2.0	1.3	0.0	0.0	0.0	0.0	0.0	153
500+	30.0	30.0	0.0	20.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	10
250-499	53.3	20.0	6.6	6.7	6.7	6.7	0.0	0.0	0.0	0.0	0.0	15
100-249	64.1	10.2	20.5	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	39
0-99	64.0	21.4	7.9	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89

BILLING, COST, AND RATE CLERKS

Nature of the Work:

BILLING CLERKS compile data, compute fees and charges, and prepare invoices for billing purposes. For example, billing clerks prepare bills, statements, and invoices to be sent to the customer and itemize the amount they owe. COST CLERKS compile production or sales cost reports on an item or total basis for each department or working unit. Finally, RATE CLERKS calculate the rates and charges for freight and other transportation fares. All of these clerks compute their charges by using a calculator.

Training Requirements:

High school graduates who have an aptitude for numbers are preferred. The ability to keep neat, accurate records, and operate calculators and posting machines is essential. On-the-job training is offered but those who have taken business arithmetic, bookkeeping, and principles of accounting have an advantage.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$267.00	$254.00	$134.00	$736.00	$225.00	$300.00
Most Experienced	307.75	300.00	159.00	736.00	265.00	335.00
Typical	267.14	260.00	150.00	481.00	235.00	295.00
Entry Level	226.55	220.00	134.00	385.00	200.00	250.00

STATEWIDE

BILLING, COST, AND RATE CLERKS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSE
ALL WORKERS												
ALL	8.5	17.3	16.9	17.1	12.0	13.3	5.3	4.6	1.7	1.1	2.2	543
500+	8.8	17.7	20.6	20.6	8.8	13.2	4.4	1.5	2.9	0.0	1.5	68
250-499	7.5	13.6	22.5	13.8	18.8	12.5	6.3	5.0	0.0	0.0	0.0	80
100-249	6.3	16.6	17.1	18.8	10.3	12.6	4.0	6.9	3.4	1.1	2.9	175
0-99	10.5	19.1	13.6	15.9	11.8	14.1	6.4	3.6	0.5	1.8	2.7	220
MOST EXPERIENCED WORKERS												
ALL	1.7	3.4	11.4	13.7	17.4	21.1	12.0	9.1	3.4	1.7	5.1	175
500+	0.0	4.8	9.5	9.5	19.0	33.3	14.3	0.0	4.8	0.0	4.8	21
250-499	3.9	0.0	7.7	11.5	23.1	23.1	19.2	11.5	0.0	0.0	0.0	26
100-249	0.0	3.7	11.1	16.7	16.7	14.8	5.6	14.8	9.3	1.7	5.6	54
0-99	2.7	4.0	13.5	13.5	14.9	21.6	13.5	6.8	0.0	2.7	6.8	74
TYPICAL WORKERS												
ALL	3.2	15.7	19.9	22.5	14.1	14.1	3.1	3.1	1.1	1.6	1.6	191
500+	4.3	8.7	26.1	39.1	8.7	8.7	0.0	0.0	4.4	0.0	0.0	23
250-499	3.7	11.1	18.5	22.2	29.7	14.8	0.0	0.0	0.0	0.0	0.0	27
100-249	1.6	12.5	25.0	20.3	10.9	15.6	3.1	6.3	0.0	1.6	3.1	64
0-99	3.9	22.0	14.3	19.5	13.0	14.3	5.2	2.6	1.3	2.6	1.3	77
ENTRY LEVEL WORKERS												
ALL	20.9	32.8	19.2	14.7	4.5	4.5	1.1	1.7	0.6	0.0	0.0	177
500+	20.8	37.5	25.0	12.5	0.0	0.0	0.0	4.2	0.0	0.0	0.0	24
250-499	14.8	29.6	40.8	7.4	3.7	0.0	0.0	3.7	0.0	0.0	0.0	27
100-249	17.6	33.3	14.0	19.3	3.5	7.0	3.5	0.0	1.8	0.0	0.0	57
0-99	26.1	31.8	13.0	14.5	7.3	5.8	0.0	1.5	0.0	0.0	0.0	69

BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS

Nature of the Work:

BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS compute, classify, and record numerical data to keep sets of financial records complete. They perform any combination of routine calculating, posting, and verifying of duties to obtain primary financial data for use in maintaining these records. They may also check the accuracy of figures, calculations, and posting pertaining to business transactions recorded by other workers.

Training Requirements:

High school graduates who have taken business arithmetic, bookkeeping, and principles of accounting meet the minimum requirements for most bookkeeping jobs. Those applicants who have completed accounting programs at the community or junior college level or those who have attended business school are preferred. The ability to use bookkeeping machines and computers is an asset. A knowledge of typing also is useful.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$300.31	$292.00	$125.00	$850.00	$250.00	$348.00
Most Experienced	351.00	345.00	160.00	850.00	300.00	400.00
Typical	300.96	298.00	150.00	700.00	260.00	337.00
Entry Level	246.77	240.00	125.00	462.00	210.00	275.00

STATEWIDE

BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	4.9	9.5	10.3	15.6	10.8	14.7	9.3	8.3	4.8	5.5	6.3	1413
500+	4.4	10.4	12.2	21.7	12.2	13.9	7.0	6.1	7.8	1.7	2.6	115
250-499	7.3	13.6	12.7	18.2	10.9	10.9	8.2	7.3	2.7	2.7	5.5	110
100-249	3.9	8.7	11.4	16.6	9.3	13.8	9.3	10.2	5.4	3.9	7.5	334
0-99	5.0	9.2	9.4	14.1	11.1	15.6	9.8	8.0	4.5	6.9	6.4	854
						MOST EXPERIENCED WORKERS						
ALL	0.4	1.9	3.2	7.9	8.9	17.7	12.8	12.1	10.0	10.0	15.1	470
500+	2.6	0.0	0.0	5.3	13.2	21.0	15.8	15.8	18.4	2.6	5.3	38
250-499	2.8	2.8	5.5	8.3	11.1	11.1	16.7	19.4	5.6	2.8	13.9	36
100-249	0.0	0.9	3.7	12.8	3.7	13.8	14.7	14.7	11.9	5.5	18.3	109
0-99	0.0	2.4	3.1	6.3	10.1	19.5	11.2	9.8	8.7	13.6	15.3	287
						TYPICAL WORKERS						
ALL	2.0	4.5	9.0	20.3	14.4	17.9	10.8	9.4	3.5	4.7	3.5	492
500+	0.0	0.0	13.2	34.2	21.1	18.4	5.3	0.0	2.6	2.6	2.6	38
250-499	5.4	8.1	10.8	24.4	16.2	18.9	2.7	2.7	2.7	5.4	2.7	37
100-249	1.7	5.0	13.3	16.7	15.0	17.5	5.8	12.5	4.2	5.0	3.3	120
0-99	2.0	4.4	6.7	19.5	13.1	17.9	14.5	10.1	3.4	4.7	3.7	297
						ENTRY LEVEL WORKERS						
ALL	12.6	23.1	19.1	18.6	8.6	8.0	4.2	3.1	0.9	1.6	0.2	451
500+	10.1	30.8	23.1	25.6	2.6	2.6	0.0	2.6	2.6	0.0	0.0	39
250-499	13.5	29.8	21.6	21.6	5.4	2.7	5.4	0.0	0.0	0.0	0.0	37
100-249	10.5	20.8	17.1	21.0	8.6	9.5	7.6	2.9	0.0	1.0	1.0	105
0-99	13.7	21.9	18.9	16.3	10.0	8.9	3.3	3.7	1.1	2.2	0.0	270

BUYERS AND PURCHASING AGENTS

Nature of the Work:

BUYERS AND PURCHASING AGENTS exhibit many of the same talents, but their roles do have important distinctions. Both are responsible for purchasing large amounts of materials, goods, and services for their organizations. The distinction between the two is that buyers purchase merchandise or commodities for resale, such as clothing for a department store, whereas purchasing agents buy raw materials, supplies, and equipment either for use within their own organizations, such as office stationery , or for further processing, such as the steel used for making automobiles.

Training Requirements:

When hiring buyers, employers give preference to those with previous retailing experience and increasingly favor college graduates for beginning positions. Courses or programs in marketing, retailing, or merchandising are helpful, but usually not essential. Many employers will accept and train graduates from any field.

Employers usually require a bachelor's degree for purchasing agents, and often prefer those with a master's degree. Technologically oriented companies may require a background in science or engineering. Familiarity with statistics and computers is always helpful. Continuing education is necessary for advancement. In private industry the recognized mark of competence is the Certified Purchasing Managers (CPM), conferred after passing an examination. In government, it is the Professional Public Buyer (PPB) conferred after an examination, and the Certified Public Purchasing Officer (CPPO), conferred only after meeting stringent basic requirements, passing a rigorous 3-part examination and an oral interview.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$24,227	$23,400	$6,500	$61,000	$18,500	$28,980
Most Experienced	29,238	28,600	7,600	61,000	24,000	34,680
Typical	23,993	24,000	7,500	50,000	20,000	28,000
Entry Level	19,038	18,457	6,500	40,000	15,000	22,000

STATEWIDE

BUYERS AND PURCHASING AGENTS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	6.6	12.4	11.3	16.0	8.8	15.0	6.4	9.7	2.7	4.3	6.8	1171
500+	3.2	3.2	10.5	8.9	10.5	15.3	8.1	11.3	7.3	6.4	15.3	124
250-499	4.1	7.1	10.1	14.1	13.1	13.1	10.1	11.1	2.0	7.1	8.1	99
100-249	5.1	10.0	11.7	14.5	8.6	16.2	8.0	10.5	4.0	5.4	6.0	351
0-99	8.9	16.6	11.4	18.6	7.8	14.6	4.5	8.5	1.2	2.7	5.2	597
MOST EXPERIENCED WORKERS												
ALL	1.0	4.8	4.0	9.3	9.9	15.7	9.6	15.9	5.3	8.6	15.9	396
500+	2.4	0.0	2.4	0.0	2.4	9.5	7.1	9.5	14.3	14.3	38.1	42
250-499	0.0	3.0	0.0	3.0	6.1	15.1	18.2	12.1	6.1	18.2	18.2	33
100-249	0.0	3.4	1.7	7.7	9.4	13.7	14.5	16.2	7.7	10.3	15.4	117
0-99	1.5	6.9	6.4	13.2	12.1	18.1	5.9	17.7	2.0	4.9	11.3	204
TYPICAL WORKERS												
ALL	4.4	8.5	12.7	19.2	9.7	18.7	7.3	9.7	2.4	3.7	3.7	411
500+	2.5	2.5	0.0	7.5	15.0	22.5	12.5	17.5	7.5	5.0	7.5	40
250-499	0.0	0.0	12.1	12.1	18.2	18.2	12.1	18.2	0.0	3.0	6.1	33
100-249	3.2	5.5	12.1	20.2	9.7	19.4	6.5	12.1	3.2	5.7	2.4	124
0-99	6.1	12.6	15.4	21.9	7.5	17.8	6.1	5.6	1.4	2.3	3.3	214
ENTRY LEVEL WORKERS												
ALL	15.7	25.0	17.6	19.5	6.6	10.2	1.9	2.6	0.3	0.3	0.3	364
500+	4.8	7.1	28.6	19.0	14.3	14.3	4.8	7.1	0.0	0.0	0.0	42
250-499	12.1	18.2	18.2	27.3	15.1	6.1	0.0	3.0	0.0	0.0	0.0	33
100-249	12.7	21.8	21.8	15.5	6.4	15.5	2.7	2.7	0.9	0.0	0.0	110
0-99	20.7	32.4	12.3	20.7	3.2	6.7	1.1	1.7	0.0	0.6	0.6	179

COMBINATION MACHINE TOOL OPERATORS AND TENDERS, METAL AND PLASTIC

Nature of the Work:

METAL AND PLASTIC COMBINATION MACHINE TOOL OPERATORS AND TENDERS operate and/or tend more than one type of cutting or forming machine which has been previously set up. Examples of such machinery include band saws, press brakes, slitting machines, drills, lathes, and boring machines. Skilled operators and tenders adjust the speed, feed, and other controls on machines according to the specifications of a particular product or job. Then they test the machines to make certain they are functioning properly and producing parts that conform to job specifications.

Training Requirements:

Employers do not require a high school diploma. However, they often prefer high school or vocational school graduates who have taken courses in mathematics, machine shop, and/or blueprint reading. Most workers learn these jobs through on-the-job training provided by their employer. Persons interested in these jobs should have manual dexterity and be mechanically inclined to use the tools and machinery required in their work. Physical stamina and strength are also essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.07	$6.99	$3.50	$17.75	$5.60	$8.22
Most Experienced	8.15	8.13	4.75	17.75	6.92	9.35
Typical	6.98	6.81	4.00	10.56	6.00	8.00
Entry Level	5.98	5.35	3.50	10.11	4.57	7.11

STATEWIDE

COMBINATION MACHINE TOOL OPERATORS AND TENDERS, METAL AND PLASTIC

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	15.1	15.7	19.3	18.7	12.6	9.0	6.0	0.6	1.8	0.6	0.6	166
500+	11.1	11.1	0.0	22.2	11.1	0.0	44.5	0.0	0.0	0.0	0.0	9
250-499	5.4	22.2	16.7	16.7	16.7	16.7	0.0	0.0	5.6	0.0	0.0	18
100-249	6.4	12.9	32.3	25.8	6.5	9.7	0.0	0.0	3.2	0.0	3.2	31
0-99	19.5	15.7	17.6	16.7	13.9	8.3	5.6	0.9	0.9	0.9	0.0	108
MOST EXPERIENCED WORKERS												
ALL	6.7	3.3	15.0	18.3	21.6	13.3	11.7	1.7	5.0	1.7	1.7	60
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	0.0	0.0	16.6	16.7	33.3	16.7	0.0	0.0	16.7	0.0	0.0	6
100-249	0.0	0.0	27.3	27.3	0.0	27.2	0.0	0.0	9.1	0.0	9.1	11
0-99	10.0	5.0	12.5	15.0	27.5	10.0	12.5	2.5	2.5	2.5	0.0	40
TYPICAL WORKERS												
ALL	7.5	17.0	30.2	17.0	13.2	11.3	3.8	0.0	0.0	0.0	0.0	53
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	0.0	33.3	16.7	0.0	16.7	33.3	0.0	0.0	0.0	0.0	0.0	6
100-249	0.0	10.0	50.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	10
0-99	11.8	14.7	29.4	20.6	8.8	11.8	2.9	0.0	0.0	0.0	0.0	34
ENTRY LEVEL WORKERS												
ALL	32.1	28.3	13.2	20.7	1.9	1.9	1.9	0.0	0.0	0.0	0.0	53
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	16.7	33.3	16.7	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
100-249	20.0	30.0	20.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10
0-99	38.3	29.4	11.8	14.7	2.9	2.9	0.0	0.0	0.0	0.0	0.0	34

* NOT PUBLISHABLE

COMPUTER OPERATORS

Nature of the Work:

COMPUTER OPERATORS control and tend computers used to process business, scientific, engineering, and other data according to operating instructions. Working from instructions written by computer programmers, they decide what computer equipment should be set up for each job. They are responsible for loading the computer with the correct cards, tapes, or disks, and for monitoring console lights for signals that indicate problems. When problems occur, they must identify and correct them, if possible. Operators also maintain detailed records on the computer programs they process and on the disposition of program outputs. Another responsibility is running the machines which are used along with the computer including printers, card-to-tape machines, card sorters, and collators.

Training Requirements:

High school graduation is the minimum educational requirement for computer operating jobs. However, since most employers look for applicants who already are skilled in operating data processing equipment, formal computer training is almost a necessity. A period of on-the-job training allows operators to become familiar with the specific equipment they will operate.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$305.49	$300.00	$144.00	$661.00	$253.00	$346.00
Most Experienced	353.72	346.00	192.00	661.00	305.00	394.00
Typical	304.89	300.00	173.00	519.00	270.00	331.00
Entry Level	257.44	250.00	144.00	492.00	225.00	288.00

STATEWIDE

COMPUTER OPERATORS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	2.3	7.6	9.8	16.0	12.6	16.9	10.5	8.1	5.9	4.6	5.7	645
500+	0.0	1.9	6.5	12.1	12.0	13.9	14.8	12.0	8.3	7.4	11.1	108
250-499	3.6	6.3	9.0	17.2	14.4	16.2	10.8	6.3	9.9	2.7	3.6	111
100-249	2.0	8.0	10.0	17.5	10.0	18.0	12.5	9.0	4.5	4.5	4.0	200
0-99	3.1	10.6	11.5	15.9	14.2	17.7	6.6	6.2	4.0	4.4	5.8	226
						MOST EXPERIENCED WORKERS						
ALL	0.5	0.9	2.4	5.7	10.4	13.7	17.1	12.8	12.8	9.5	14.2	211
500+	0.0	0.0	0.0	0.0	2.8	2.9	20.0	8.6	14.3	20.0	31.4	35
250-499	2.8	0.0	0.0	2.8	13.9	16.7	13.9	11.1	22.2	5.5	11.1	36
100-249	0.0	1.5	1.5	7.5	7.5	10.2	23.9	19.4	10.5	9.0	9.0	67
0-99	0.0	1.4	5.5	8.2	15.1	20.4	11.0	9.6	9.6	6.9	12.3	73
						TYPICAL WORKERS						
ALL	1.3	3.6	7.1	15.6	17.3	24.0	12.4	8.0	4.4	3.6	2.7	225
500+	0.0	0.0	0.0	8.3	16.7	16.7	25.0	19.4	8.3	2.8	2.8	36
250-499	2.6	0.0	7.9	21.0	15.8	21.1	13.2	7.9	7.9	2.6	0.0	38
100-249	1.4	2.9	8.7	14.5	17.4	29.0	10.1	5.8	2.9	4.4	2.9	69
0-99	1.2	7.3	8.5	17.1	18.3	24.4	8.5	4.9	2.4	3.7	3.7	82
						ENTRY LEVEL WORKERS						
ALL	5.3	18.7	20.1	26.8	9.6	12.4	1.9	3.2	0.5	1.0	0.5	209
500+	0.0	5.4	18.9	27.1	16.2	21.6	0.0	8.1	2.7	0.0	0.0	37
250-499	5.4	18.9	18.9	27.1	13.5	10.8	5.4	0.0	0.0	0.0	0.0	37
100-249	4.7	20.3	20.3	31.2	4.7	14.1	3.1	1.6	0.0	0.0	0.0	64
0-99	8.5	24.0	21.1	22.5	8.5	7.0	0.0	4.2	0.0	2.8	1.4	71

COMPUTER PROGRAMMERS

Nature of the Work:

COMPUTER PROGRAMMERS write detailed instructions called programs, that list in a logical order the steps that a computer must follow to organize data, solve a problem, or do some other task. Usually working from descriptions prepared by systems analysts, the programmer writes the specific program for the problem, in a series of coded instructions (software) using one of the languages, such as ASSEMBLER, BASIC, COBOL and FORTRAN, developed especially for computers. They also test programs to insure they are working correctly and prepare an instruction sheet for the computer operators.

Programmers generally work a standard week, but their hours may sometimes vary. Occasionally they may have to report to work early or stay late in order to use the computer when it is available. When new programs are being tested they may get calls from computer operators for advice at any hour of the day or night.

Training Requirements:

A college degree is preferred. Employers using computers for scientific or engineering application, seek applicants who have had courses in computer or information science, mathematics, engineering, or the physical sciences.

Employers who use computers for business applications prefer to hire people who have had courses in programming and business. Also, experience in accounting,inventory and other business skills is generally preferred.

Applicants should have the ability to think logically and be capable of exacting analytical work. The ability to work with abstract concepts and do technical analyses is particularly important for systems programmers. The job calls for patience, persistence, and the ability to work with extreme accuracy even under pressure.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$25,736	$24,544	$12,000	$68,100	$20,000	$30,000
Most Experienced	31,473	30,000	16,000	68,100	26,000	35,880
Typical	25,470	25,000	15,000	43,900	21,684	29,000
Entry Level	20,310	19,760	12,000	42,000	17,316	23,400

STATEWIDE

COMPUTER PROGRAMMERS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	3.2	9.2	11.4	13.4	13.7	12.2	9.5	9.5	4.7	5.0	8.2	402
500+	2.1	7.1	8.2	15.3	16.3	6.1	14.3	6.1	8.2	6.1	10.2	98
250-499	1.4	4.2	15.5	14.1	16.9	12.7	14.1	11.3	4.2	4.2	1.4	71
100-249	3.2	9.6	12.0	12.8	15.2	14.4	8.0	9.6	5.6	4.0	5.6	125
0-99	5.6	13.9	11.1	12.0	7.4	14.8	3.7	11.1	0.9	5.6	13.9	108
MOST EXPERIENCED WORKERS												
ALL	0.0	4.5	3.0	3.8	9.0	12.8	12.0	13.5	10.5	9.8	21.1	133
500+	0.0	3.1	0.0	6.2	9.4	3.1	12.5	6.3	15.6	12.5	31.3	32
250-499	0.0	0.0	4.2	4.2	8.3	8.3	25.0	20.8	12.5	12.5	4.2	24
100-249	0.0	2.5	4.9	2.4	14.6	12.2	12.2	14.6	12.2	9.8	14.6	41
0-99	0.0	11.1	2.8	2.8	2.8	25.0	2.8	13.9	2.8	5.4	30.6	36
TYPICAL WORKERS												
ALL	0.0	6.7	7.4	17.0	16.3	17.0	11.9	12.6	3.7	5.2	2.2	135
500+	0.0	6.1	3.0	18.2	15.1	9.1	24.2	9.1	9.1	6.1	0.0	33
250-499	0.0	4.4	8.7	13.0	17.4	26.1	17.4	13.0	0.0	0.0	0.0	23
100-249	0.0	6.8	9.1	13.6	20.4	20.5	6.8	13.6	4.6	2.3	2.3	44
0-99	0.0	8.6	8.6	22.8	11.4	14.3	2.9	14.3	0.0	11.4	5.7	35
ENTRY LEVEL WORKERS												
ALL	9.7	16.4	23.9	19.4	15.7	6.7	4.5	2.2	0.0	0.0	1.5	134
500+	6.1	12.1	21.2	21.2	24.2	6.1	6.1	3.0	0.0	0.0	0.0	33
250-499	4.2	8.3	33.3	25.0	25.0	4.2	0.0	0.0	0.0	0.0	0.0	24
100-249	10.0	20.0	22.5	22.5	10.0	10.0	5.0	0.0	0.0	0.0	0.0	40
0-99	16.3	21.6	21.6	10.8	8.1	5.4	5.4	5.4	0.0	0.0	5.4	37

COMPUTER SERVICE TECHNICIANS

Nature of the Work:

COMPUTER SERVICE TECHNICIANS are responsible for keeping computer equipment in good working order. On a routine basis, they adjust, oil, and clean mechanical and electro-mechanical parts. They also check for loose connections and defective components or circuits. In addition, computer service technicians must determine the cause of computer malfunctions and make repairs. They may also help install and test new equipment.

Training Requirements:

Employers usually require that applicants for technician trainee jobs have one to two years training in basic electronics or electrical engineering. Training of this type can be obtained at public and private vocational schools, community and junior colleges, and colleges and universities. Training is also available in the Armed Forces. Technicians need good vision and color perception to work with small parts and color-coded wiring. Manual dexterity and normal hearing are also required.

Once hired, a trainee is usually given three to six months of additional classroom instruction and six months to two years of on-the-job training before being considered fully skilled. Experienced technicians often take advanced courses to keep up with changes in technology.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$10.53	$10.16	$5.50	$18.40	$ 8.50	$12.33
Most Experienced	12.58	12.11	7.61	18.40	10.20	14.55
Typical	10.43	10.16	7.00	13.80	8.90	11.88
Entry Level	8.29	7.99	5.50	12.02	6.73	10.07

STATEWIDE

COMPUTER SERVICE TECHNICIANS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	0.0	1.5	7.3	10.3	14.7	8.8	19.1	7.4	11.8	5.9	13.2	68
500+	0.0	3.7	0.0	11.1	14.8	3.7	18.6	11.1	18.5	3.7	14.8	27
250-499	0.0	0.0	0.0	16.7	16.7	33.3	33.3	0.0	0.0	0.0	0.0	6
100-249	0.0	0.0	12.5	12.5	12.5	12.5	18.6	12.5	6.3	6.3	6.3	16
0-99	0.0	0.0	15.8	5.3	15.8	5.3	15.8	0.0	10.5	10.5	21.0	19
						MOST EXPERIENCED WORKERS						
ALL	0.0	0.0	0.0	4.1	8.3	4.2	25.0	0.0	16.7	4.2	37.5	24
500+	0.0	0.0	0.0	0.0	11.1	0.0	11.1	0.0	33.3	0.0	44.5	9
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	0.0	0.0	0.0	20.0	40.0	0.0	20.0	0.0	20.0	5
0-99	0.0	0.0	0.0	12.5	12.5	0.0	12.5	0.0	0.0	12.5	50.0	8
						TYPICAL WORKERS						
ALL	0.0	0.0	0.0	4.4	21.8	17.4	17.4	13.0	13.0	13.0	0.0	23
500+	0.0	0.0	0.0	11.1	0.0	11.1	22.3	22.2	22.2	11.1	0.0	9
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	0.0	0.0	33.3	16.6	16.7	16.7	0.0	16.7	0.0	6
0-99	0.0	0.0	0.0	0.0	33.3	16.6	16.7	0.0	16.7	16.7	0.0	6
						ENTRY LEVEL WORKERS						
ALL	0.0	4.7	23.8	23.8	14.3	4.8	14.3	9.5	4.8	0.0	0.0	21
500+	0.0	11.1	0.0	22.2	33.4	0.0	22.2	11.1	0.0	0.0	0.0	9
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	40.0	40.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	5
0-99	0.0	0.0	60.0	0.0	0.0	0.0	20.0	0.0	20.0	0.0	0.0	5

* NOT PUBLISHABLE

CONSTRUCTION TRADES AND EXTRACTIVE OCCUPATIONS, EXCEPT MATERIAL MOVING

Nature of the Work:

CONSTRUCTION TRADES AND EXTRACTIVE OCCUPATION (EXCEPT MATERIAL MOVING) WORKERS construct, alter, and maintain buildings, other structures, bridges, pipelines, and similar projects. They measure, cut, and shape a variety of materials such as plastic, wood, and metal by using hand and power tools. They are responsible for repairing plumbing, electrical problems, carpets, floors, walls, and roofs. Occupations in this field are, for example, plumbers, carpenters, and painters.

Training Requirements:

Formal apprenticeship training is recommended as the best way to acquire the all-round skills of the construction trades. Apprenticeship is a prescribed period of on-the-job training, usually three to four years, supplemented by related classroom instruction that is designed to familiarize apprentices with the materials, tools, and principles of their trade. To enter an apprenticeship program, an applicant must generally be 18 years old. A high school or vocational school education or its equivalent, including courses in mathematics and mechanical drawing, is desirable. Courses in construction trades, such as carpentry and electricity, also are recommended.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 9.70	$ 9.75	$5.00	$14.00	$8.54	$11.03
Most Experienced	10.93	11.03	7.40	14.00	9.50	12.19
Typical	9.76	10.00	5.77	12.19	8.59	11.00
Entry Level	8.44	8.59	5.00	11.39	7.24	9.40

STATEWIDE

CONSTRUCTION TRADES AND EXTRACTIVE OCCUPATIONS, EXCEPT MATERIAL MOVING

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	0.0	3.9	1.6	11.0	20.5	15.7	16.5	18.1	9.5	2.4	0.8	127
500+	0.0	2.5	0.0	5.0	30.0	17.5	22.5	10.0	10.0	2.5	0.0	40
250-499	0.0	5.7	0.0	17.2	11.4	11.4	8.6	31.4	11.4	0.0	2.9	35
100-249	0.0	0.0	0.0	4.2	20.8	29.2	20.8	20.8	4.2	0.0	0.0	24
0-99	0.0	7.2	7.1	17.9	17.9	7.1	14.3	10.7	10.7	7.1	0.0	28
						MOST EXPERIENCED WORKERS						
ALL	0.0	0.0	0.0	2.4	11.9	16.7	11.9	21.4	26.2	7.1	2.4	42
500+	0.0	0.0	0.0	0.0	14.3	21.4	14.3	21.4	21.4	7.2	0.0	14
250-499	0.0	0.0	0.0	9.1	9.1	9.1	9.1	18.2	36.3	0.0	9.1	11
100-249	0.0	0.0	0.0	0.0	0.0	25.0	12.5	50.0	12.5	0.0	0.0	8
0-99	0.0	0.0	0.0	0.0	22.2	11.1	11.1	0.0	33.4	22.2	0.0	9
						TYPICAL WORKERS						
ALL	0.0	2.4	0.0	11.9	21.4	11.9	21.4	28.6	2.4	0.0	0.0	42
500+	0.0	0.0	0.0	0.0	33.4	8.3	41.7	8.3	8.3	0.0	0.0	12
250-499	0.0	8.4	0.0	8.3	16.7	8.3	0.0	58.3	0.0	0.0	0.0	12
100-249	0.0	0.0	0.0	0.0	25.0	25.0	37.5	12.5	0.0	0.0	0.0	8
0-99	0.0	0.0	0.0	40.0	10.0	10.0	10.0	30.0	0.0	0.0	0.0	10
						ENTRY LEVEL WORKERS						
ALL	0.0	9.3	4.6	18.6	27.9	18.6	16.3	4.7	0.0	0.0	0.0	43
500+	0.0	7.1	0.0	14.3	42.9	21.4	14.3	0.0	0.0	0.0	0.0	14
250-499	0.0	8.3	0.0	33.3	8.3	16.7	16.7	16.7	0.0	0.0	0.0	12
100-249	0.0	0.0	0.0	12.5	37.5	37.5	12.5	0.0	0.0	0.0	0.0	8
0-99	0.0	22.3	22.2	11.1	22.2	0.0	22.2	0.0	0.0	0.0	0.0	9

DATA ENTRY KEYERS, EXCEPT COMPOSING

Nature of the Work:

DATA ENTRY KEYERS (EXCEPT COMPOSING) enter information or data into a computer system in a variety of ways. In some systems, keypunch operators using a machine with a keyboard prepare input by punching patterns of holes in computer cards to represent specific letters, numbers, and special characters. In others, data typists use special machines that convert the information they type to holes in cards or magnetic impulses on tapes or disks. In some systems, data enter the computer at the source of the transaction being recorded, e.g. at the loading dock or at a supermarket checkout line.

Training Requirements:

A high school education is required. Preference is given to those applicants who have some community or junior college training, especially in data processing, although on-the-job training is usually offered. Data entry personnel often are tested for their ability to work quickly and accurately, and they should be able to work under close supervision as a part of a team.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$262.44	$256.00	$160.00	$471.15	$224.00	$298.00
Most Experienced	301.39	300.00	194.00	471.15	262.00	331.00
Typical	262.96	260.00	180.00	442.31	231.00	288.46
Entry Level	223.97	220.00	160.00	384.62	200.00	245.00

STATEWIDE

DATA ENTRY KEYERS, EXCEPT COMPOSING

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	8.5	17.4	17.2	19.4	12.4	12.0	6.3	2.8	3.3	0.0	0.7	459
500+	4.7	10.7	16.5	17.5	13.6	14.6	10.7	4.9	6.8	0.0	0.0	103
250-499	8.6	15.4	19.2	16.4	17.3	14.4	3.9	2.9	1.9	0.0	0.0	104
100-249	9.6	19.9	18.1	21.7	12.7	6.6	7.8	1.2	1.8	0.0	0.6	166
0-99	10.5	23.3	13.8	20.9	4.7	16.3	1.2	3.5	3.5	0.0	2.3	86
						MOST EXPERIENCED WORKERS						
ALL	0.7	2.7	8.8	18.9	14.2	23.5	16.9	6.1	6.8	0.0	1.4	148
500+	0.0	0.0	2.9	8.8	11.8	20.6	32.4	8.8	14.7	0.0	0.0	34
250-499	0.0	3.0	12.1	3.0	24.2	36.4	9.1	6.1	6.1	0.0	0.0	33
100-249	1.8	1.9	9.3	29.6	14.8	14.8	18.5	3.7	3.7	0.0	1.9	54
0-99	0.0	7.4	11.1	29.7	3.7	29.6	3.7	7.4	3.7	0.0	3.7	27
						TYPICAL WORKERS						
ALL	1.9	14.5	22.0	22.6	21.4	12.0	2.5	0.0	2.5	0.0	0.6	159
500+	0.0	5.9	8.8	32.3	26.5	20.6	0.0	0.0	5.9	0.0	0.0	34
250-499	0.0	11.1	27.8	22.2	27.8	8.3	2.8	0.0	0.0	0.0	0.0	36
100-249	3.5	17.5	28.1	17.5	21.0	5.3	5.3	0.0	1.8	0.0	0.0	57
0-99	3.1	21.9	18.7	21.9	9.4	18.8	0.0	0.0	3.1	0.0	3.1	32
						ENTRY LEVEL WORKERS						
ALL	23.0	34.9	20.4	16.4	1.3	0.7	0.0	2.6	0.7	0.0	0.0	152
500+	14.3	25.7	37.1	11.4	2.9	2.9	0.0	5.7	0.0	0.0	0.0	35
250-499	25.7	31.4	17.1	22.9	0.0	0.0	0.0	2.9	0.0	0.0	0.0	35
100-249	23.6	40.0	16.4	18.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	55
0-99	29.6	40.8	11.1	11.1	0.0	0.0	0.0	3.7	3.7	0.0	0.0	27

DATA KEYERS, COMPOSING

Nature of the Work:

COMPOSING DATA KEYERS operate magnetic-tape recording and typographic composing machines to prepare copy used for offset printing of forms, documents, advertisements, and other matter, following copy and layout instructions and using knowledge of typesetting and typing techniques.

Training Requirements:

A high school education is generally required. A knowledge of data entry composing machines is preferred although on-the-job training is sometimes available. The ability to work under close supervision as part of a team is essential. Good spelling, punctuation, and grammar are essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$313.69	$300.00	$180.00	$485.00	$245.00	$365.38
Most Experienced	377.40	384.00	225.00	485.00	314.00	460.00
Typical	302.19	298.00	200.00	406.00	260.00	335.00
Entry Level	249.33	227.00	180.00	350.00	210.00	293.00

STATEWIDE

DATA KEYERS, COMPOSING

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	1.5	13.4	10.5	11.9	11.9	13.4	6.0	6.0	9.0	3.0	13.4	67
500+	0.0	5.4	22.2	5.6	22.2	16.7	5.6	0.0	5.6	5.6	11.1	18
250-499	0.0	33.3	16.6	16.7	0.0	0.0	0.0	16.7	16.7	0.0	0.0	6
100-249	0.0	11.1	5.4	11.1	16.7	11.1	0.0	16.7	5.6	5.6	16.7	18
0-99	4.0	16.0	4.0	16.0	4.0	16.0	12.0	0.0	12.0	0.0	16.0	25
MOST EXPERIENCED WORKERS												
ALL	0.0	0.0	4.0	4.0	12.0	20.0	4.0	0.0	16.0	4.0	36.0	25
500+	0.0	0.0	0.0	0.0	16.7	50.0	0.0	0.0	0.0	0.0	33.3	6
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	0.0	0.0	28.6	14.3	0.0	0.0	0.0	14.3	42.8	7
0-99	0.0	0.0	10.0	0.0	0.0	10.0	10.0	0.0	30.0	0.0	40.0	10
TYPICAL WORKERS												
ALL	0.0	4.8	9.5	23.8	14.3	14.3	9.5	9.5	9.5	4.8	0.0	21
500+	0.0	0.0	16.6	16.7	33.3	0.0	0.0	0.0	16.7	16.7	0.0	6
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	16.7	0.0	33.3	0.0	0.0	0.0	33.3	16.7	0.0	0.0	6
0-99	0.0	0.0	0.0	25.0	12.5	37.5	25.0	0.0	0.0	0.0	0.0	8
ENTRY LEVEL WORKERS												
ALL	4.8	38.1	19.0	9.5	9.5	4.8	4.8	9.5	0.0	0.0	0.0	21
500+	0.0	16.6	50.0	0.0	16.7	0.0	16.7	0.0	0.0	0.0	0.0	6
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	20.0	20.0	0.0	20.0	20.0	0.0	20.0	0.0	0.0	0.0	5
0-99	14.3	57.1	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7

* NOT PUBLISHABLE

DRAFTERS

Nature of the Work:

DRAFTERS prepare detailed plans that show the exact dimensions of objects and their parts which workers follow during building or manufacturing. They prepare these drawings based on rough sketches, specifications, and calculations made by engineers, architects, scientists, and designers. They also calculate the strength, quality, quantity, and cost of materials. Their drawings contain a view of the object from all sides, as well as specifications for the materials to be used and the procedures to be followed. Drafters usually specialize in a particular field of work, such as mechanical, electrical, aeronautical, structural, or architectural drafting.

Training Requirements:

Hiring requirements vary according to the work or level of responsibility. Well qualified high school graduates who have studied drafting may qualify for an entry level position such as a tracer. An associate's degree in drafting from a technical institute, junior or community college, or extension division of a university is usually required for other positions. Individuals interested in drafting should be able to do free-hand drawings of three dimensional objects and detailed work requiring a high degree of accuracy. They should also have good eyesight and manual dexterity.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$20,306	$19,198	$ 8,320	$50,003	$16,000	$23,900
Most Experienced	25,057	24,000	13,000	50,003	20,800	28,000
Typical	20,285	20,000	10,400	40,000	17,000	23,000
Entry Level	15,719	15,300	8,320	36,000	13,520	18,000

STATEWIDE

DRAFTERS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	17.7	18.6	16.3	17.4	9.4	8.5	3.8	3.6	1.1	1.8	1.8	609
500+	12.5	18.2	22.7	28.4	6.8	4.5	4.6	2.3	0.0	0.0	0.0	88
250-499	17.4	23.2	17.4	18.8	7.2	8.7	2.9	2.9	1.5	0.0	0.0	69
100-249	23.6	21.1	12.4	14.3	10.6	6.2	3.1	4.3	0.0	2.5	1.9	161
0-99	15.9	16.2	16.2	15.5	10.0	11.0	4.1	3.8	2.1	2.4	2.8	291
MOST EXPERIENCED WORKERS												
ALL	1.5	6.2	13.3	19.0	14.4	15.9	8.2	9.7	2.6	4.1	5.1	195
500+	0.0	0.0	13.8	41.4	10.3	13.8	13.8	6.9	0.0	0.0	0.0	29
250-499	0.0	0.0	30.4	21.7	8.7	21.7	4.4	8.7	4.4	0.0	0.0	23
100-249	3.9	9.8	9.8	13.8	19.6	15.7	3.9	13.7	0.0	3.9	5.9	51
0-99	1.1	7.6	10.9	14.1	14.1	15.2	9.8	8.7	4.4	6.5	7.6	92
TYPICAL WORKERS												
ALL	10.8	17.4	20.7	22.5	12.7	9.4	2.8	1.4	0.9	0.9	0.5	213
500+	3.5	17.3	31.0	37.9	10.3	0.0	0.0	0.0	0.0	0.0	0.0	29
250-499	4.4	36.4	18.2	18.2	13.6	4.6	4.6	0.0	0.0	0.0	0.0	22
100-249	19.3	17.5	21.1	19.3	12.3	3.5	3.5	0.0	0.0	3.5	0.0	57
0-99	9.5	13.3	18.1	20.9	13.3	16.2	2.9	2.9	1.9	0.0	1.0	105
ENTRY LEVEL WORKERS												
ALL	40.8	31.8	14.4	10.5	1.0	0.5	0.5	0.0	0.0	0.5	0.0	201
500+	33.3	36.7	23.3	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30
250-499	45.8	33.3	4.2	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24
100-249	47.2	35.8	5.7	9.4	0.0	0.0	1.9	0.0	0.0	0.0	0.0	53
0-99	38.3	27.7	19.1	10.6	2.1	1.1	0.0	0.0	0.0	1.1	0.0	94

DRILL AND BORE MACHINE TOOL SETTERS AND SET-UP OPERATORS

Nature of the Work:

DRILL AND BORE MACHINE TOOL SETTERS AND SET-UP OPERATORS set up and/or operate drilling and boring machines to perform numerous machine operations such as drilling, boring, reaming, tapping of holes, milling, and countersinking metal or plastic parts according to specifications, tooling instructions, and standard charts. They must read blueprints or job orders for product specifications, hole locations and dimensions, and tooling instructions, to determine holding fixtures, feed rates, cutting speeds, and cutting tools to be used.

Training Requirements:

A high school diploma is not required, although preference is given to those who are high school or vocational school graduates and have taken courses in mathematics, machine shop and/or blueprint reading. Persons interested in these jobs should have manual dexterity and be mechanically inclined. Most workers learn these jobs through on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.02	$8.00	$3.35	$18.00	$6.50	$ 9.36
Most Experienced	9.36	9.09	4.00	18.00	7.95	10.68
Typical	8.00	8.00	3.75	13.54	6.75	9.03
Entry Level	6.65	6.30	3.35	13.24	5.17	7.87

STATEWIDE

DRILL AND BORE MACHINE TOOL SETTERS AND SET-UP OPERATORS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
					ALL WORKERS							
ALL	8.1	9.0	16.2	16.5	17.1	14.0	9.6	4.4	1.9	1.6	1.6	321
500+	0.0	10.3	3.3	13.8	24.1	20.7	13.8	3.5	3.5	3.5	3.5	29
250-499	0.0	9.1	9.1	30.3	18.2	9.1	15.1	6.1	3.0	0.0	0.0	33
100-249	5.3	1.8	18.2	16.4	21.8	14.6	7.3	7.3	0.0	5.5	1.8	55
0-99	11.3	10.8	18.6	14.7	14.7	13.7	8.8	3.4	2.0	0.5	1.5	204
					MOST EXPERIENCED WORKERS							
ALL	2.8	2.8	7.4	12.9	17.6	20.4	14.8	8.3	5.6	2.8	4.6	108
500+	0.0	0.0	0.0	0.0	22.3	22.2	22.2	11.1	11.1	0.0	11.1	9
250-499	0.0	0.0	0.0	18.2	18.2	18.2	27.2	9.1	9.1	0.0	0.0	11
100-249	0.0	0.0	0.0	11.1	22.2	33.3	11.1	5.6	0.0	11.1	5.6	18
0-99	4.3	4.3	11.4	14.3	15.7	17.1	12.9	8.6	5.7	1.4	4.3	70
					TYPICAL WORKERS							
ALL	5.6	3.7	20.4	18.5	22.2	13.9	11.1	3.7	0.0	0.9	0.0	108
500+	0.0	0.0	10.0	20.0	30.0	10.0	20.0	0.0	0.0	10.0	0.0	10
250-499	0.0	0.0	18.2	18.2	36.3	9.1	9.1	9.1	0.0	0.0	0.0	11
100-249	5.3	0.0	15.8	21.0	31.6	10.5	5.3	10.5	0.0	0.0	0.0	19
0-99	7.2	5.9	23.5	17.7	16.2	16.2	11.8	1.5	0.0	0.0	0.0	68
					ENTRY LEVEL WORKERS							
ALL	16.2	20.8	21.0	18.1	11.4	7.6	2.9	1.0	0.0	1.0	0.0	105
500+	0.0	30.0	0.0	20.0	20.0	30.0	0.0	0.0	0.0	0.0	0.0	10
250-499	0.0	27.3	9.1	54.5	0.0	0.0	9.1	0.0	0.0	0.0	0.0	11
100-249	11.1	5.4	38.9	16.7	11.1	0.0	5.6	5.6	0.0	5.6	0.0	18
0-99	22.8	22.7	21.2	12.1	12.1	7.6	1.5	0.0	0.0	0.0	0.0	66

ELECTRICAL AND ELECTRONIC ASSEMBLERS

Nature of the Work:

ELECTRICAL AND ELECTRONIC ASSEMBLERS put together electrical and electronic equipment, such as computers, calculators, missile control systems, and machine-tool numerical controls. They usually employ both hand tools and electronic test equipment, and must read and follow drawings and sketches as well as wiring diagrams. They may use tiny cutters, tweezers, and magnifying glasses to work with small components. Assemblers attach components, connect lead wires, and route and fasten precut jumper wires, cables, and circuits. They may also solder, cut and strip wire, and test completed assemblies.

Training Requirements:

For the most advanced electronic assembly positions, specific vocational and on-the-job training of more than two years may be needed. For the less complex assembly jobs, training is usually done on-the-job. Employers prefer to hire high school graduates. Good eyesight, including color vision, manual dexterity, and good eye-hand coordination are essential for most electronic assembly jobs.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.06	$6.75	$3.65	$18.00	$5.55	$8.49
Most Experienced	8.42	8.46	5.00	18.00	7.25	9.18
Typical	7.10	6.75	4.10	14.00	6.00	8.00
Entry Level	5.67	5.25	3.65	10.00	4.75	6.04

STATEWIDE

ELECTRICAL AND ELECTRONIC ASSEMBLERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	12.8	20.1	19.7	15.4	15.8	9.0	4.3	1.7	0.4	0.0	0.8	234
500+	9.6	19.2	21.1	11.5	21.2	5.8	7.7	3.9	0.0	0.0	0.0	52
250-499	12.5	37.5	12.5	12.5	12.5	8.3	0.0	0.0	4.2	0.0	0.0	24
100-249	13.7	16.4	23.3	19.2	12.3	11.0	2.7	1.4	0.0	0.0	0.0	73
0-99	14.1	18.8	17.6	15.3	16.5	9.4	4.7	1.2	0.0	0.0	2.4	85
						MOST EXPERIENCED WORKERS						
ALL	0.0	9.2	11.8	21.1	22.4	18.4	9.2	5.3	1.3	0.0	1.3	76
500+	0.0	11.8	11.8	5.9	35.3	5.9	17.5	11.8	0.0	0.0	0.0	17
250-499	0.0	12.5	25.0	25.0	0.0	25.0	0.0	0.0	12.5	0.0	0.0	8
100-249	0.0	4.2	8.3	33.3	25.0	20.8	4.2	4.2	0.0	0.0	0.0	24
0-99	0.0	11.1	11.1	18.6	18.5	22.2	11.1	3.7	0.0	0.0	3.7	27
						TYPICAL WORKERS						
ALL	6.1	17.1	30.5	17.1	19.5	6.1	2.4	0.0	0.0	0.0	1.2	82
500+	0.0	11.8	35.3	17.6	23.5	5.9	5.9	0.0	0.0	0.0	0.0	17
250-499	0.0	50.0	12.5	12.5	25.0	0.0	0.0	0.0	0.0	0.0	0.0	8
100-249	8.0	16.0	40.0	16.0	8.0	8.0	4.0	0.0	0.0	0.0	0.0	25
0-99	9.4	12.5	25.0	18.7	25.0	6.3	0.0	0.0	0.0	0.0	3.1	32
						ENTRY LEVEL WORKERS						
ALL	32.9	34.2	15.8	7.9	5.3	2.6	1.3	0.0	0.0	0.0	0.0	76
500+	27.8	33.3	16.7	11.1	5.5	5.6	0.0	0.0	0.0	0.0	0.0	18
250-499	37.5	50.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	8
100-249	33.3	29.2	20.8	8.3	4.2	4.2	0.0	0.0	0.0	0.0	0.0	24
0-99	34.6	34.6	15.4	7.7	3.8	0.0	3.9	0.0	0.0	0.0	0.0	26

ELECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS AND TECHNOLOGISTS

Nature of the Work:

ELECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS AND TECHNOLOGISTS develop, manufacture, and service electric and electronic equipment and systems. Some who work in this field handle many different types of equipment, applying their skills over a range that can extend from radio, radar, sonar, and television to industrial and medical measuring or control devices, navigational equipment, and computers. However, most specialize in just one area, such as automatic control devices or micro-computers.

Typically, electronic technicians draw upon knowledge of electrical and electronic theory, physical science, and mathematics in order to perform the duties of their job. They may use sophisticated measuring and diagnostic devices to test, adjust, and repair equipment. In many cases, technicians must possess a basic understanding of the field in which the electronic device they are working on is to be used.

Training Requirements:

Electrical and electronic engineering technicians and technologists need good color vision, manual dexterity, and good eye-hand coordination. The specialized training needed in basic electricity and electronics technology is available from a variety of educational institutions in programs lasting from several months to several years. Training through an apprenticeship program or in the Armed Forces are also options. The specific level of skill and training required by employers varies and technicians, once hired, usually must complete a period of on-the-job training often supplemented with additional classroom instruction.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$22,288	$22,000	$10,000	$41,000	$17,900	$26,400
Most Experienced	27,719	27,040	15,600	41,000	24,232	31,096
Typical	22,103	22,000	11,400	35,000	19,300	25,000
Entry Level	17,151	17,000	10,000	32,000	15,000	18,720

STATEWIDE

ELECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS AND TECHNOLOGISTS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	9.8	14.3	14.8	15.4	11.6	14.8	5.3	7.1	3.3	1.5	2.1	337
500+	5.7	14.3	18.6	24.3	11.4	12.9	7.1	4.3	1.4	0.0	0.0	70
250-499	2.3	7.0	13.9	20.9	7.0	25.6	0.0	11.6	4.7	0.0	7.0	43
100-249	6.5	16.3	18.5	9.8	15.2	13.0	4.3	6.5	3.3	4.4	2.2	92
0-99	16.7	15.1	10.6	12.9	10.6	13.6	6.8	7.6	3.8	0.8	1.5	132
MOST EXPERIENCED WORKERS												
ALL	0.0	1.8	6.4	7.5	12.8	22.9	13.8	17.4	7.3	3.7	6.4	109
500+	0.0	0.0	0.0	22.7	13.6	27.3	18.2	13.6	4.6	0.0	0.0	22
250-499	0.0	0.0	0.0	0.0	14.3	35.7	0.0	21.4	7.2	0.0	21.4	14
100-249	0.0	0.0	9.7	3.2	12.9	25.8	12.9	12.9	6.4	9.7	6.5	31
0-99	0.0	4.7	9.5	4.8	11.9	14.3	16.7	21.4	9.5	2.4	4.8	42
TYPICAL WORKERS												
ALL	4.3	10.3	13.7	25.6	18.8	18.8	2.6	2.6	2.6	0.7	0.0	117
500+	0.0	0.0	26.1	34.8	21.7	13.0	4.4	0.0	0.0	0.0	0.0	23
250-499	0.0	0.0	6.6	40.0	6.7	26.7	0.0	13.3	6.7	0.0	0.0	15
100-249	0.0	12.5	18.8	18.8	28.1	12.5	0.0	3.1	3.1	3.1	0.0	32
0-99	10.6	17.0	6.4	21.3	14.9	23.4	4.3	0.0	2.1	0.0	0.0	47
ENTRY LEVEL WORKERS												
ALL	25.3	30.6	24.3	12.6	2.7	2.7	0.0	1.8	0.0	0.0	0.0	111
500+	16.0	40.0	28.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25
250-499	7.2	21.4	35.7	21.4	0.0	14.3	0.0	0.0	0.0	0.0	0.0	14
100-249	20.7	37.9	27.6	6.9	3.4	0.0	0.0	3.5	0.0	0.0	0.0	29
0-99	39.5	23.3	16.3	11.6	4.7	2.3	0.0	2.3	0.0	0.0	0.0	43

ELECTRICAL AND ELECTRONIC ENGINEERS

Nature of the Work:

ELECTRICAL AND ELECTRONIC ENGINEERS design, develop, test, and supervise the manufacture of electrical and electronic equipment. This equipment includes the transmission facilities used by electric utilities, and the circuits and systems used in communications, computers, and biomedical instrumentation, to name a few. These engineers usually specialize in one major area, such as power distribution or electrical machine manufacturing. In addition, they may design new electrical products, write performance requirements, and develop maintenance schedules.

Training Requirements:

Preparation for electrical and electronic engineering starts at the high school level, where candidates should be in the upper half of a college preparatory program, and be comfortable with mathematics, physics, chemistry, and the sciences in general. A good command of the English language is important as well. Employers require a college degree in engineering. Graduate training is essential for most teaching jobs but is not usually needed for entry level positions.

Many colleges offer two or four year programs leading to a degree in electrical or electronic engineering technology. Some employers, however, regard graduates of these technology programs as having skills between those of a technician and an engineer, and beginning engineering jobs may not be open to them.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$34,473	$33,000	$12,000	$100,000	$26,700	$40,000
Most Experienced	43,681	42,800	17,680	100,000	36,300	49,324
Typical	33,774	34,872	16,640	52,000	30,000	38,000
Entry Level	25,689	25,000	12,000	42,560	23,000	29,500

STATEWIDE

ELECTRICAL AND ELECTRONIC ENGINEERS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	0.9	1.2	2.4	5.4	6.4	12.9	7.5	11.3	6.8	11.5	33.7	425
500+	0.0	0.0	1.1	6.4	8.5	10.6	9.6	10.6	11.7	10.6	30.9	94
250-499	0.0	0.0	0.0	2.7	2.7	21.6	5.4	16.2	5.4	5.4	40.6	37
100-249	1.6	3.3	2.5	6.6	4.9	15.6	6.6	11.5	4.1	12.3	31.0	122
0-99	1.2	0.6	3.5	4.4	7.0	10.5	7.6	10.5	6.4	12.8	35.5	172
						MOST EXPERIENCED WORKERS						
ALL	0.0	0.0	1.4	0.7	0.7	3.6	2.8	4.3	7.8	9.2	69.5	141
500+	0.0	0.0	0.0	0.0	3.1	6.2	0.0	0.0	9.4	12.5	68.8	32
250-499	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	8.3	8.3	75.0	12
100-249	0.0	0.0	2.7	0.0	0.0	0.0	2.6	10.5	5.3	10.5	68.4	38
0-99	0.0	0.0	1.7	1.7	0.0	5.1	5.1	1.7	8.4	6.8	69.5	59
						TYPICAL WORKERS						
ALL	0.0	0.7	2.0	2.7	4.0	6.8	8.8	14.9	10.1	22.3	27.7	148
500+	0.0	0.0	0.0	3.3	3.2	3.2	16.1	16.1	19.4	16.1	22.6	31
250-499	0.0	0.0	0.0	0.0	0.0	0.0	7.7	38.4	7.7	7.7	38.5	13
100-249	0.0	2.3	0.0	4.5	2.3	11.4	9.1	13.6	6.8	22.7	27.3	44
0-99	0.0	0.0	5.0	1.7	6.7	6.7	5.0	10.0	8.3	28.3	28.3	60
						ENTRY LEVEL WORKERS						
ALL	3.1	2.9	3.7	13.2	14.7	29.4	11.0	14.7	2.2	2.2	2.9	136
500+	0.0	0.0	3.2	16.1	19.4	22.6	12.9	16.1	6.5	3.2	0.0	31
250-499	0.0	0.0	0.0	8.4	8.3	66.7	8.3	0.0	0.0	0.0	8.3	12
100-249	5.0	7.5	5.0	15.0	12.5	35.0	7.5	10.0	0.0	2.5	0.0	40
0-99	3.8	1.9	3.8	11.3	15.1	20.6	13.2	20.8	1.9	1.9	5.7	53

ELECTRICAL AND ELECTRONIC EQUIPMENT ASSEMBLERS - PRECISION

Nature of the Work:

ELECTRICAL AND ELECTRONIC PRECISION EQUIPMENT ASSEMBLERS are responsible for assembling, testing, or modifying electric and electronic equipment according to precise instructions for use in machinery. Bench work generally requires the ability to do precise and detailed work. Electronic bench assemblers use tweezers, tiny cutters, and magnifying lenses to put together the small components used in radios and calculators.

Training Requirements:

Although a high school diploma is helpful, it usually is not required. Good eyesight, with or without glasses, is essential due to the nature of the work, and applicants often are tested for color blindness. In addition, employers seek workers who can do routine work at a fast pace.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.71	$7.35	$3.50	$14.60	$6.21	$ 9.17
Most Experienced	9.23	9.00	6.00	14.60	7.56	10.10
Typical	7.64	7.25	4.40	12.51	6.50	8.79
Entry Level	6.33	5.75	3.50	10.51	5.00	7.00

STATEWIDE

ELECTRICAL AND ELECTRONIC EQUIPMENT ASSEMBLERS - PRECISION

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	7.5	14.9	18.6	17.4	11.8	13.0	7.5	4.4	3.7	0.6	0.6	161
500+	0.0	13.9	19.5	13.9	19.4	8.3	13.9	8.3	2.8	0.0	0.0	36
250-499	9.5	28.6	14.3	18.9	4.8	14.3	4.8	0.0	4.8	0.0	0.0	21
100-249	13.9	8.3	22.2	16.6	16.7	16.7	2.8	0.0	2.8	0.0	0.0	36
0-99	7.2	14.7	17.7	19.1	7.4	13.2	7.4	5.9	4.4	1.5	1.5	68
						MOST EXPERIENCED WORKERS						
ALL	0.0	0.0	5.8	25.0	17.3	21.2	7.7	11.5	7.7	1.9	1.9	52
500+	0.0	0.0	8.3	16.7	25.0	16.7	8.3	16.7	8.3	0.0	0.0	12
250-499	0.0	0.0	14.3	42.8	0.0	14.3	14.3	0.0	14.3	0.0	0.0	7
100-249	0.0	0.0	0.0	16.7	41.7	25.0	8.3	0.0	8.3	0.0	0.0	12
0-99	0.0	0.0	4.8	28.6	4.8	23.8	4.8	18.8	4.8	4.8	4.8	21
						TYPICAL WORKERS						
ALL	3.7	9.1	32.7	18.2	12.7	10.9	7.3	1.8	3.6	0.0	0.0	55
500+	0.0	0.0	33.3	16.7	16.7	0.0	25.0	8.3	0.0	0.0	0.0	12
250-499	0.0	28.5	28.6	14.3	14.3	14.3	0.0	0.0	0.0	0.0	0.0	7
100-249	8.4	8.3	33.3	33.3	0.0	16.7	0.0	0.0	0.0	0.0	0.0	12
0-99	4.2	8.3	33.3	12.5	16.7	12.5	4.2	0.0	8.3	0.0	0.0	24
						ENTRY LEVEL WORKERS						
ALL	18.5	35.2	16.7	9.2	5.6	7.4	7.4	0.0	0.0	0.0	0.0	54
500+	0.0	41.7	16.7	8.3	16.7	8.3	8.3	0.0	0.0	0.0	0.0	12
250-499	28.6	57.1	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	7
100-249	33.4	16.7	33.3	0.0	8.3	8.3	0.0	0.0	0.0	0.0	0.0	12
0-99	17.4	34.8	13.0	17.4	0.0	4.4	13.0	0.0	0.0	0.0	0.0	23

ELECTROMECHANICAL EQUIPMENT ASSEMBLERS - PRECISION

Nature of the Work:

PRECISION ELECTROMECHANICAL EQUIPMENT ASSEMBLERS are responsible for the assembling, testing, and preparing of precision electromechanical equipment such as servomechanisms, gear trains, gyros, dynamometers, wave guides, and magnetic drums. They must follow blueprints, diagrams, and oral and written instructions.

Training Requirements:

Many of these workers learn their trade on-the-job or through apprenticeship training. Employers look for applicants who have mechanical aptitude and like to work with their hands. A high school education often is required and employers prefer applicants who have had courses in mathematics, chemistry, physics, blueprint reading and shop. No matter how their basic skills are developed, electromechanical equipment assemblers usually receive additional training from their employer.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.28	$7.00	$3.35	$14.00	$5.95	$ 8.46
Most Experienced	8.87	8.46	5.52	14.00	7.50	10.10
Typical	7.34	7.04	4.00	11.00	6.00	8.29
Entry Level	5.89	5.80	3.55	8.82	5.00	6.73

STATEWIDE

ELECTROMECHANICAL EQUIPMENT ASSEMBLERS - PRECISION

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	8.2	17.5	20.6	16.5	17.1	7.1	8.2	2.4	1.2	0.6	0.6	170
500+	6.7	16.7	23.4	13.3	20.0	3.3	10.0	3.3	3.3	0.0	0.0	30
250-499	6.7	30.0	20.0	20.0	0.0	3.3	16.7	3.3	0.0	0.0	0.0	30
100-249	8.1	10.8	27.1	18.9	21.6	10.8	2.7	0.0	0.0	0.0	0.0	37
0-99	9.6	16.4	16.4	15.1	20.5	8.2	6.9	2.7	1.4	1.4	1.4	73
MOST EXPERIENCED WORKERS												
ALL	0.0	1.6	11.1	20.4	24.1	13.0	16.7	5.6	3.7	1.9	1.9	54
500+	0.0	0.0	10.0	10.0	40.0	10.0	10.0	10.0	10.0	0.0	0.0	10
250-499	0.0	10.0	20.0	30.0	0.0	0.0	30.0	10.0	0.0	0.0	0.0	10
100-249	0.0	0.0	8.4	25.0	33.3	25.0	8.3	0.0	0.0	0.0	0.0	12
0-99	0.0	0.0	9.1	18.2	22.7	13.6	18.2	4.4	4.6	4.6	4.6	22
TYPICAL WORKERS												
ALL	5.1	15.2	27.1	15.3	18.6	8.5	8.5	1.7	0.0	0.0	0.0	59
500+	0.0	10.0	50.0	10.0	10.0	0.0	20.0	0.0	0.0	0.0	0.0	10
250-499	0.0	30.0	40.0	0.0	0.0	10.0	20.0	0.0	0.0	0.0	0.0	10
100-249	7.7	0.0	30.7	30.8	23.1	7.7	0.0	0.0	0.0	0.0	0.0	13
0-99	7.7	19.2	11.5	15.4	26.9	11.5	3.9	3.9	0.0	0.0	0.0	26
ENTRY LEVEL WORKERS												
ALL	19.3	35.1	22.8	14.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0	57
500+	20.0	40.0	10.0	20.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	10
250-499	20.0	50.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10
100-249	16.7	33.3	41.7	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	12
0-99	20.0	28.0	28.0	12.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	25

FINANCIAL MANAGERS

Nature of the Work:

FINANCIAL MANAGERS are directly responsible for the financial activities of an organization. They spend their days planning, organizing, directing, controlling, and coordinating the many fiscal concerns which govern all institutions. For example, an important part of a financial manager's job may involve advising on credit and investment policy or negotiating general policy with financial or other institutions. The role of the financial manager should, therefore, be considered one of extreme significance in guiding the organization to solid monetary and fiscal decisions.

Training Requirements:

College graduates with a business administration major in finance or a liberal arts curriculum, including accounting, economics, commercial law, political science, and statistics, serve as excellent preparation for financial management trainees. A Master of Business Administration (MBA) in addition to a social science bachelor's degree may provide an even stronger educational foundation. The ability to communicate both orally and in writing is important. They also need tact, good judgment, and leadership abilities to supervise numerous employees.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$37,225	$35,000	$12,000	$175,000	$28,000	$45,000
Most Experienced	45,284	44,000	20,000	175,000	35,000	52,000
Typical	36,577	35,000	15,600	75,200	30,000	43,000
Entry Level	28,513	26,000	12,000	61,300	23,660	33,444

STATEWIDE

FINANCIAL MANAGERS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $19,999	$20,000 $24,999	$25,000 $29,999	$30,000 $34,999	$35,000 $39,999	$40,000 $44,999	$45,000 $49,999	$50,000 $54,999	$55,000 $59,999	$60,000 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	0.9	3.8	8.0	17.1	17.8	16.1	9.3	8.9	8.0	3.3	6.8	573
500+	0.0	0.0	1.5	12.3	21.5	16.9	10.8	18.5	6.2	4.6	7.7	65
250-499	0.0	0.0	6.0	16.4	16.4	20.9	13.4	10.4	3.0	6.0	7.5	67
100-249	1.2	1.8	7.3	16.3	17.0	20.0	8.5	8.5	8.5	3.6	7.3	165
0-99	1.1	6.9	10.5	18.8	17.8	12.3	8.3	6.5	9.4	2.2	6.2	276
MOST EXPERIENCED WORKERS												
ALL	0.0	0.0	3.5	7.5	13.0	15.9	11.4	12.9	14.9	6.5	14.4	201
500+	0.0	0.0	0.0	0.0	0.0	14.3	4.8	38.1	19.0	9.5	14.3	21
250-499	0.0	0.0	0.0	8.7	8.7	21.8	13.0	8.7	8.7	8.7	21.7	23
100-249	0.0	0.0	3.6	3.6	12.7	16.4	12.7	7.3	16.4	9.1	18.2	55
0-99	0.0	0.0	4.9	10.8	16.7	14.7	11.7	11.8	14.7	3.9	10.8	102
TYPICAL WORKERS												
ALL	0.0	3.0	5.0	15.9	22.9	19.9	10.3	10.0	7.5	1.5	4.0	201
500+	0.0	0.0	0.0	9.1	9.1	31.8	27.3	13.6	0.0	0.0	9.1	22
250-499	0.0	0.0	0.0	13.1	21.7	21.7	17.4	17.4	0.0	8.7	0.0	23
100-249	0.0	1.7	5.1	15.2	23.7	23.7	5.1	13.6	8.5	1.7	1.7	59
0-99	0.0	5.0	7.2	18.6	25.8	14.4	8.3	5.2	10.3	0.0	5.2	97
ENTRY LEVEL WORKERS												
ALL	2.9	9.4	17.0	29.8	17.5	11.7	5.3	2.9	0.6	1.7	1.2	171
500+	0.0	0.0	4.3	27.3	54.6	4.6	0.0	4.6	0.0	4.6	0.0	22
250-499	0.0	0.0	18.9	28.6	19.1	19.1	9.5	4.8	0.0	0.0	0.0	21
100-249	3.9	3.9	13.7	31.4	13.7	19.6	7.9	3.9	0.0	0.0	2.0	51
0-99	3.9	18.2	22.1	29.8	9.1	6.5	3.9	1.3	1.3	2.6	1.3	77

FREIGHT, STOCK, AND MATERIAL MOVERS - HAND

Nature of the Work:

FREIGHT, STOCK, AND MATERIAL MOVERS, who are responsible for the manual moving of materials, do so by loading or unloading materials onto or from pallets, trays, racks, and shelves. They work in a variety of settings such as warehouses, production areas, stockrooms, or shipping departments.

Training Requirements:

Freight and material movers require no formal training, but many employers prefer high school graduates. Applicant must be in good physical condition. Those who have taken high school business courses, such as business arithmetic and typing have an advantage over other applicants. The ability to write legibly and keep orderly records is also important.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$6.29	$6.00	$3.35	$15.00	$5.00	$7.50
Most Experienced	7.18	7.17	3.78	15.00	6.00	8.13
Typical	6.39	6.00	3.64	11.73	5.25	7.43
Entry Level	5.31	5.00	3.35	11.06	4.15	6.00

STATEWIDE

FREIGHT, STOCK, AND MATERIAL MOVERS - HAND

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	21.6	26.0	19.5	14.9	10.3	4.6	2.0	0.7	0.2	0.0	0.2	565
500+	5.8	13.5	25.0	21.1	23.1	11.5	0.0	0.0	0.0	0.0	0.0	52
250-499	9.2	18.5	26.2	24.6	9.2	1.6	4.6	4.6	1.5	0.0	0.0	65
100-249	20.0	32.1	19.4	14.6	8.5	4.2	1.2	0.0	0.0	0.0	0.0	165
0-99	28.3	26.5	17.3	11.7	9.2	4.2	2.1	0.3	0.0	0.0	0.4	283
						MOST EXPERIENCED WORKERS						
ALL	5.4	19.5	21.1	24.3	16.2	7.6	3.8	1.1	0.5	0.0	0.5	185
500+	0.0	0.0	16.7	33.3	27.8	22.2	0.0	0.0	0.0	0.0	0.0	18
250-499	0.0	9.1	22.7	31.8	18.2	4.4	4.6	4.6	4.6	0.0	0.0	22
100-249	0.0	29.6	20.4	27.8	11.1	7.4	3.7	0.0	0.0	0.0	0.0	54
0-99	11.0	19.7	22.0	18.7	16.5	5.5	4.4	1.1	0.0	0.0	1.1	91
						TYPICAL WORKERS						
ALL	14.7	29.5	23.1	15.3	10.0	5.3	1.6	0.5	0.0	0.0	0.0	190
500+	0.0	12.5	31.1	18.8	31.3	6.3	0.0	0.0	0.0	0.0	0.0	16
250-499	4.4	18.2	27.3	31.8	9.1	0.0	4.6	4.6	0.0	0.0	0.0	22
100-249	10.9	43.6	21.8	10.9	7.3	5.5	0.0	0.0	0.0	0.0	0.0	55
0-99	21.5	26.8	21.7	13.4	8.3	6.2	2.1	0.0	0.0	0.0	0.0	97
						ENTRY LEVEL WORKERS						
ALL	44.2	29.0	14.7	5.3	4.7	1.1	0.5	0.5	0.0	0.0	0.0	190
500+	16.7	27.8	27.8	11.1	11.1	5.5	0.0	0.0	0.0	0.0	0.0	18
250-499	23.8	28.6	28.6	9.5	0.0	0.0	4.7	4.8	0.0	0.0	0.0	21
100-249	48.2	23.2	16.1	5.4	7.1	0.0	0.0	0.0	0.0	0.0	0.0	56
0-99	51.6	32.6	8.4	3.2	3.2	1.0	0.0	0.0	0.0	0.0	0.0	95

GENERAL MANAGERS AND TOP EXECUTIVES

Nature of the Work:

GENERAL MANAGERS AND TOP EXECUTIVES direct and coordinate the activities of an organization to obtain optimum efficiency and economy of operations and maximize profits. They plan, develop, and implement, through subordinate administrative personnel, the organizational policies and goals of the company. They are also responsible for the coordination of activities of divisions or departments.

Training Requirements:

Because the nature of the work varies, so does the level of education required. Some managers and administrators, including school principals and hospital administrators, need at least a master's degree. Positions such as these require the specialized knowledge & skills obtained through years of formal education.

Since maturity & knowledge are essential, entrants to administrative and managerial occupations are generally older and have more education and work experience then entrants to most other occupations.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$45,910	$40,000	$10,000	$400,000	$30,000	$55,000
Most Experienced	58,327	50,000	14,900	400,000	38,000	70,000
Typical	43,552	40,000	14,000	190,000	30,000	50,585
Entry Level	32,283	30,000	10,000	107,200	22,360	40,000

STATEWIDE

GENERAL MANAGERS AND TOP EXECUTIVES

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $19,999	$20,000 $24,999	$25,000 $29,999	$30,000 $34,999	$35,000 $39,999	$40,000 $44,999	$45,000 $49,999	$50,000 $54,999	$55,000 $59,999	$60,000 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	1.0	5.0	7.9	10.3	11.4	11.3	10.4	6.7	10.1	3.5	22.4	1933
500+	0.0	1.3	2.5	2.5	15.2	11.4	7.6	8.8	8.9	5.1	36.7	79
250-499	0.0	1.2	0.0	1.2	6.1	8.5	17.1	8.5	19.5	3.7	34.2	82
100-249	0.0	1.2	3.6	6.9	7.5	11.1	9.9	9.3	11.4	6.9	32.2	333
0-99	1.4	6.3	9.6	12.0	12.5	11.5	10.2	5.9	9.4	2.6	18.6	1439
MOST EXPERIENCED WORKERS												
ALL	0.2	0.8	2.4	5.7	8.7	10.1	8.7	7.1	12.0	4.9	39.4	715
500+	0.0	0.0	0.0	0.0	3.8	7.7	7.7	7.7	7.7	3.9	61.5	26
250-499	0.0	0.0	0.0	0.0	0.0	3.7	0.0	11.1	14.8	0.0	70.4	27
100-249	0.0	0.0	0.0	2.6	1.7	5.9	4.2	4.2	11.9	9.3	60.2	118
0-99	0.2	1.1	3.1	7.0	10.9	11.4	10.1	7.5	12.1	4.2	32.4	544
TYPICAL WORKERS												
ALL	0.5	3.5	8.6	11.7	10.2	11.8	12.4	8.5	11.5	3.8	17.5	685
500+	0.0	0.0	3.9	0.0	7.7	11.5	11.5	7.7	15.4	7.7	34.6	26
250-499	0.0	0.0	0.0	0.0	3.6	7.1	14.3	10.7	35.7	3.6	25.0	28
100-249	0.0	0.0	1.6	7.0	5.3	12.3	13.2	14.9	12.3	8.8	24.6	114
0-99	0.6	4.6	10.8	13.9	11.8	12.0	12.2	7.0	9.9	2.5	14.7	517
ENTRY LEVEL WORKERS												
ALL	3.0	12.6	14.3	14.6	16.7	12.2	10.0	3.9	5.8	1.3	5.6	533
500+	0.0	3.7	3.7	7.4	33.4	14.8	3.7	11.1	3.7	3.7	14.8	27
250-499	0.0	3.7	0.0	3.7	14.8	14.8	37.1	3.7	7.4	7.4	7.4	27
100-249	0.0	4.0	9.9	11.9	16.8	15.8	12.9	8.9	9.9	2.0	7.9	101
0-99	4.2	16.1	17.2	16.7	15.6	10.9	7.7	2.1	4.8	0.5	4.2	378

GENERAL OFFICE CLERKS

Nature of the Work:

GENERAL OFFICE CLERKS have varied duties which usually include a combination of bookkeeping, typing, office machine operation, and filing. They may also stamp, sort, and distribute mail, send out requests for supplies, and respond to telephone calls. Some write or type bills, statements, receipts, or checks and may receive money from customers and deposit money in banks. Other duties often include running errands, stuffing envelopes, duplicating documents and copying information from one record to another.

Training Requirements:

Employers prefer high school graduates. Applicants who have taken business related courses, such as typing or business math, who have experience in office work, or who have received training at the post-secondary level are particularly attractive.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$246.41	$240.00	$117.25	$634.62	$200.00	$280.00
Most Experienced	284.39	280.00	150.00	634.62	250.00	315.00
Typical	249.75	240.38	140.00	560.00	220.00	275.00
Entry Level	204.92	200.00	117.25	365.59	180.00	225.00

STATEWIDE

GENERAL OFFICE CLERKS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	16.7	21.7	17.1	15.7	10.0	9.3	2.9	3.4	1.1	1.0	1.1	1226
500+	9.0	20.0	20.0	14.0	16.0	7.0	4.0	8.0	1.0	0.0	1.0	100
250-499	16.7	16.7	16.7	20.2	13.2	10.5	2.6	1.6	1.8	0.0	0.0	114
100-249	18.2	23.3	17.8	17.8	9.1	8.3	2.3	2.4	0.4	0.0	0.4	253
0-99	17.3	22.1	16.5	14.6	9.0	9.7	3.0	3.4	1.2	1.6	1.6	759
MOST EXPERIENCED WORKERS												
ALL	3.5	8.3	13.8	19.9	16.6	16.9	6.1	7.6	2.5	2.3	2.5	397
500+	0.0	3.0	9.1	15.2	27.3	15.2	12.1	12.1	3.0	0.0	3.0	33
250-499	5.4	0.0	8.1	21.6	27.1	18.9	8.1	5.4	5.4	0.0	0.0	37
100-249	2.5	12.2	9.9	30.9	12.4	17.3	6.2	6.2	1.2	0.0	1.2	81
0-99	4.1	8.9	16.7	16.7	15.0	16.7	4.9	7.7	2.4	3.7	3.2	246
TYPICAL WORKERS												
ALL	10.7	19.9	22.5	19.5	11.1	9.1	2.8	2.1	0.7	0.7	0.9	431
500+	3.0	12.1	27.3	24.2	21.2	6.1	0.0	6.1	0.0	0.0	0.0	33
250-499	7.9	21.1	23.7	26.3	10.5	10.5	0.0	0.0	0.0	0.0	0.0	38
100-249	12.2	22.2	27.8	14.5	13.3	7.8	1.1	1.1	0.0	0.0	0.0	90
0-99	11.5	20.0	20.0	19.6	9.3	9.6	4.1	2.2	1.1	1.1	1.5	270
ENTRY LEVEL WORKERS												
ALL	36.4	36.9	14.3	7.6	2.0	2.0	0.0	0.8	0.0	0.0	0.0	398
500+	23.5	44.1	23.5	3.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	34
250-499	35.9	28.2	17.9	12.8	2.6	2.6	0.0	0.0	0.0	0.0	0.0	39
100-249	40.3	35.4	14.6	8.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	82
0-99	37.0	37.9	12.4	7.0	2.4	2.9	0.0	0.4	0.0	0.0	0.0	243

GRINDING, LAPPING, AND BUFFING MACHINE TOOL SETTERS AND SET-UP OPERATORS

Nature of the Work:

GRINDING, LAPPING, AND BUFFING MACHINE TOOL SETTERS AND SET-UP OPERATORS set up and/or operate grinding, lapping, and buffing machines. The grinding machines removes excess material or burrs from internal or external surfaces and sharpens edges or corners according to blueprint specifications. A lapping machine smooths surfaces of flat, cylindrical, or spherical objects or of adjacent mechanical parts to a specified finish. Honing and polishing metal or plastic workpieces according to a work order are the functions of the buffing apparatus.

Training Requirements:

Employers do not require a high school diploma. However, they often prefer high school or vocational school graduates who have taken courses in mathematics, machine shop, and blueprint reading. Most workers learn these jobs through on-the-job training provided by their employer. Persons interested in these jobs should have manual dexterity and be mechanically inclined to use the tools and machinery required in their work. Physical stamina and strength are also essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.04	$8.00	$3.75	$19.00	$6.30	$ 9.47
Most Experienced	9.44	9.12	4.95	19.00	8.00	10.70
Typical	8.07	8.00	4.38	14.01	6.75	9.00
Entry Level	6.62	6.13	3.75	13.31	5.00	7.93

STATEWIDE

GRINDING, LAPPING, AND BUFFING MACHINE TOOL SETTERS AND SET-UP OPERATORS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	6.6	9.4	18.0	15.9	18.3	11.4	9.3	4.5	3.5	1.4	1.7	289
500+	2.7	0.0	10.8	10.8	24.4	21.6	16.2	5.4	2.7	0.0	5.4	37
250-499	3.1	6.2	9.4	28.1	18.8	15.6	12.5	6.3	0.0	0.0	0.0	32
100-249	4.6	4.4	20.0	17.8	24.4	8.9	6.7	4.4	2.2	4.4	2.2	45
0-99	8.6	13.2	20.6	14.3	15.4	9.1	8.0	4.0	4.6	1.1	1.1	175
MOST EXPERIENCED WORKERS												
ALL	1.0	0.0	7.3	16.7	21.9	15.6	14.6	7.3	8.3	3.1	4.2	96
500+	0.0	0.0	0.0	7.7	30.7	15.4	15.4	15.4	7.7	0.0	7.7	13
250-499	0.0	0.0	0.0	18.2	18.2	27.2	27.3	9.1	0.0	0.0	0.0	11
100-249	0.0	0.0	0.0	20.0	33.3	13.3	6.6	6.7	6.7	6.7	6.7	15
0-99	1.8	0.0	12.3	17.6	17.5	14.0	14.0	5.3	10.5	3.5	3.5	57
TYPICAL WORKERS												
ALL	2.1	6.3	21.0	17.9	24.2	9.5	11.6	4.2	2.1	0.0	1.1	95
500+	0.0	0.0	0.0	18.2	27.2	18.2	27.3	0.0	0.0	0.0	9.1	11
250-499	0.0	0.0	20.0	10.0	40.0	10.0	10.0	10.0	0.0	0.0	0.0	10
100-249	0.0	0.0	28.6	21.4	28.6	7.1	14.3	0.0	0.0	0.0	0.0	14
0-99	3.5	10.0	23.3	18.3	20.0	8.3	8.3	5.0	3.3	0.0	0.0	60
ENTRY LEVEL WORKERS												
ALL	16.3	21.4	25.5	13.3	9.2	9.2	2.1	2.0	0.0	1.0	0.0	98
500+	7.7	0.0	30.7	7.7	15.4	30.8	7.7	0.0	0.0	0.0	0.0	13
250-499	9.1	18.2	9.1	54.5	0.0	9.1	0.0	0.0	0.0	0.0	0.0	11
100-249	12.5	12.5	31.1	12.5	12.5	6.3	0.0	6.3	0.0	6.3	0.0	16
0-99	20.7	29.3	25.9	6.9	8.6	5.2	1.7	1.7	0.0	0.0	0.0	58

GRINDING AND POLISHING WORKERS - HAND

Nature of the Work:

GRINDING AND POLISHING WORKERS grind and polish a wide variety of metal, stone, clay, plastic, and glass objects or parts using hand tools or hand held power tools. They must select a grinding wheel of the correct size, shape, and grade for each operation. After grinding, the grit is washed away and the surface is checked to ensure it is smooth, even, and free of defects. Any cracks or imperfections found are then filled and the surface is polished. The result is a clean, smooth finish.

Training Requirements:

Although many people learn their skills by working with experienced craft workers, apprenticeship training is the best way to learn a skilled trade. Automobile manufacturers, working with labor unions, offer apprenticeships in many crafts. Others are trained at company schools, or at local technical schools or junior colleges.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.29	$7.00	$3.35	$18.00	$5.75	$ 8.81
Most Experienced	8.71	8.69	4.00	18.00	7.25	10.00
Typical	7.43	7.50	3.60	13.94	6.00	8.69
Entry Level	5.70	5.50	3.35	9.47	4.75	6.50

STATEWIDE

GRINDING AND POLISHING WORKERS - HAND

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSE
ALL WORKERS												
ALL	13.3	15.8	19.4	13.8	15.8	11.2	6.1	1.6	0.5	1.0	1.5	196
500+	0.0	5.4	11.1	11.1	27.8	27.8	5.6	0.0	5.6	0.0	5.6	18
250-499	10.0	25.0	10.0	20.0	15.0	15.0	5.0	0.0	0.0	0.0	0.0	20
100-249	9.4	15.6	18.7	12.5	31.3	6.3	0.0	3.1	0.0	0.0	3.1	32
0-99	16.7	15.9	22.2	13.5	10.3	9.5	7.9	1.6	0.0	1.6	0.8	126
MOST EXPERIENCED WORKERS												
ALL	1.6	4.6	15.4	16.9	18.5	15.4	16.9	4.6	0.0	1.5	4.6	65
500+	0.0	0.0	0.0	0.0	50.0	16.6	16.7	0.0	0.0	0.0	16.7	6
250-499	0.0	0.0	0.0	57.1	0.0	28.6	14.3	0.0	0.0	0.0	0.0	7
100-249	0.0	0.0	20.0	0.0	50.0	10.0	0.0	10.0	0.0	0.0	10.0	10
0-99	2.4	7.1	19.0	16.7	9.5	14.3	21.4	4.8	0.0	2.4	2.4	42
TYPICAL WORKERS												
ALL	9.0	13.4	19.4	17.9	20.9	14.9	1.5	0.0	1.5	1.5	0.0	67
500+	0.0	0.0	0.0	33.3	16.7	33.3	0.0	0.0	16.7	0.0	0.0	6
250-499	0.0	33.3	16.7	0.0	33.3	16.7	0.0	0.0	0.0	0.0	0.0	6
100-249	0.0	18.2	18.2	27.2	27.3	9.1	0.0	0.0	0.0	0.0	0.0	11
0-99	13.6	11.4	22.7	15.9	18.2	13.6	2.3	0.0	0.0	2.3	0.0	44
ENTRY LEVEL WORKERS												
ALL	29.7	29.7	23.4	6.3	7.8	3.1	0.0	0.0	0.0	0.0	0.0	64
500+	0.0	16.7	33.3	0.0	16.7	33.3	0.0	0.0	0.0	0.0	0.0	6
250-499	28.6	42.8	14.3	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	7
100-249	27.2	27.3	18.2	9.1	18.2	0.0	0.0	0.0	0.0	0.0	0.0	11
0-99	35.0	30.0	25.0	7.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	40

GUARDS AND WATCH GUARDS

Nature of the Work:

GUARDS AND WATCH GUARDS' duties vary with the size, type, and location of their employer. They may serve in various roles including undercover detectives, traffic directors, and as sources of general information. In general, however, they patrol and inspect property to protect it against fire, theft, vandalism, and illegal entry. As they make their rounds, for example, guards check all doors and windows, see that no unauthorized persons remain after working hours, and insure that fire extinguishers, alarms, sprinkler systems, furnaces, and various electrical and plumbing systems are working properly. They sometimes set thermostats or turn on lights for janitorial workers.

Guards usually are uniformed and often carry a nightstick and/or gun. They also may carry a flashlight, whistle, two-way radio, and a watch clock - a device that indicates the time at which they reach various checkpoints.

Training Requirements:

Most employers prefer guards who are high school graduates. Employers also seek people who have had experience in the military police or in state and local police departments. Most persons who enter guards jobs have prior work experience, although it is usually unrelated. Some have retired from military careers or other protective services, and guard employment is a second career.

Applicants are expected to have good character references, no police record, good health - especially in hearing and vision - and good personal habits such as neatness and dependability. They should be mentally alert, emotionally stable, and physically fit to cope with emergencies. Some employers require guards to meet height and weight specifications or to be within a certain age range.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$6.51	$6.25	$2.75	$13.46	$5.20	$7.53
Most Experienced	7.36	7.36	3.85	13.46	5.83	8.47
Typical	6.51	6.49	2.95	10.58	5.34	7.23
Entry Level	5.66	5.44	2.75	10.00	4.70	6.25

STATEWIDE

GUARDS AND WATCH GUARDS

HOURLY WAGES

COMPANY SIZE	UNDER $4.00	$4.00 $4.49	$4.50 $4.99	$5.00 $5.49	$5.50 $5.99	$6.00 $6.49	$6.50 $6.99	$7.00 $7.49	$7.50 $7.99	$8.00 $8.49	$8.50 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	5.3	4.8	6.8	14.5	11.6	10.6	10.1	9.7	6.3	5.8	14.5	207
500+	1.5	4.4	4.4	5.9	7.4	13.2	8.8	11.8	10.3	8.8	23.5	68
250-499	0.0	2.0	10.2	18.4	16.3	8.2	10.2	16.3	2.0	8.2	8.2	49
100-249	2.6	5.3	5.3	15.8	15.8	5.3	20.9	7.9	5.3	2.6	13.2	38
0-99	17.3	7.7	7.7	21.1	9.6	13.5	3.9	1.9	5.8	1.9	9.6	52
						MOST EXPERIENCED WORKERS						
ALL	2.8	1.4	4.3	7.1	11.4	4.3	12.9	10.0	8.6	12.9	24.3	70
500+	0.0	4.3	0.0	0.0	0.0	4.4	13.0	8.7	4.4	21.7	43.5	23
250-499	0.0	0.0	5.5	11.1	22.2	0.0	5.6	22.2	5.6	16.7	11.1	18
100-249	0.0	0.0	7.7	7.7	7.7	0.0	30.7	7.7	15.4	0.0	23.1	13
0-99	12.5	0.0	6.1	12.5	18.8	12.5	6.3	0.0	12.5	6.3	12.5	16
						TYPICAL WORKERS						
ALL	4.5	4.5	3.0	14.9	9.0	14.9	13.4	13.4	7.5	3.0	11.9	67
500+	0.0	4.3	0.0	4.6	4.6	22.7	4.6	18.2	18.2	4.6	18.2	22
250-499	0.0	0.0	6.5	20.0	6.7	6.7	26.7	20.0	0.0	6.7	6.7	15
100-249	0.0	7.3	0.0	21.4	21.4	7.1	21.4	7.1	0.0	0.0	14.3	14
0-99	18.3	6.3	6.3	18.8	6.3	18.8	6.3	6.3	6.3	0.0	6.3	16
						ENTRY LEVEL WORKERS						
ALL	8.6	8.6	12.8	21.4	14.3	12.9	4.3	5.7	2.9	1.4	7.1	70
500+	4.4	4.4	13.0	13.0	17.4	13.0	8.7	8.7	8.7	0.0	8.7	23
250-499	0.0	6.0	18.8	25.0	18.8	18.8	0.0	6.3	0.0	0.0	6.3	16
100-249	9.1	9.1	9.1	18.1	18.2	9.1	9.1	9.1	0.0	9.1	0.0	11
0-99	20.0	15.0	10.0	30.0	5.0	10.0	0.0	0.0	0.0	0.0	10.0	20

HAND PACKERS AND PACKAGERS

Nature of the Work:

HAND PACKERS AND PACKAGERS are responsible for the manual packaging of materials and products. They perform any combination of the following duties: clean packaging containers, line and pad crates, assemble cartons, obtain and sort products, wrap protective material around products, insert or pour products into containers or fill containers from spout or chute, weigh containers and adjust quantity, or nail, glue or close and seal containers.

Training Requirements:

For these positions, applicants may have less than a high school education. Previous formal training is not required of new applicants because they are given on-the-job training as new employees. The ability to move, sort and handle objects quickly and accurately is essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$5.68	$5.32	$3.35	$12.85	$4.50	$6.60
Most Experienced	6.51	6.05	3.55	12.85	5.40	7.50
Typical	5.74	5.40	3.50	12.65	4.70	6.57
Entry Level	4.83	4.50	3.35	12.02	4.00	5.25

STATEWIDE

HAND PACKERS AND PACKAGERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	36.3	26.1	16.8	10.4	6.7	2.3	0.8	0.2	0.4	0.0	0.0	924
500+	14.5	24.7	21.7	20.3	13.0	5.8	0.0	0.0	0.0	0.0	0.0	69
250-499	18.4	29.9	21.8	13.8	6.9	8.0	1.2	0.0	0.0	0.0	0.0	87
100-249	31.4	25.0	14.2	12.6	12.3	2.0	1.0	0.5	1.0	0.0	0.0	204
0-99	43.6	26.1	16.3	7.8	3.9	1.1	0.7	0.2	0.3	0.0	0.0	564
						MOST EXPERIENCED WORKERS						
ALL	11.5	28.9	25.7	14.9	12.2	3.7	1.7	0.7	0.7	0.0	0.0	296
500+	4.3	17.4	26.1	17.4	26.1	8.7	0.0	0.0	0.0	0.0	0.0	23
250-499	0.0	27.6	20.7	20.7	13.8	13.8	3.4	0.0	0.0	0.0	0.0	29
100-249	7.6	28.8	18.2	21.2	16.7	3.0	1.5	1.5	1.5	0.0	0.0	66
0-99	15.7	30.9	29.2	11.2	8.4	1.7	1.7	0.6	0.6	0.0	0.0	178
						TYPICAL WORKERS						
ALL	32.5	31.2	15.2	12.6	5.4	2.2	0.6	0.0	0.3	0.0	0.0	317
500+	4.5	27.3	22.7	31.8	9.1	4.6	0.0	0.0	0.0	0.0	0.0	22
250-499	6.9	41.4	24.1	13.8	6.9	6.9	0.0	0.0	0.0	0.0	0.0	29
100-249	28.1	31.0	12.7	11.3	12.7	2.8	1.4	0.0	0.0	0.0	0.0	71
0-99	41.0	30.3	13.8	10.8	2.1	1.0	0.5	0.0	0.5	0.0	0.0	195
						ENTRY LEVEL WORKERS						
ALL	64.0	18.0	10.0	3.8	2.9	1.0	0.0	0.0	0.3	0.0	0.0	311
500+	33.3	29.1	16.7	12.5	4.2	4.2	0.0	0.0	0.0	0.0	0.0	24
250-499	48.3	20.7	20.7	6.9	0.0	3.4	0.0	0.0	0.0	0.0	0.0	29
100-249	58.2	14.9	11.9	6.0	7.5	0.0	0.0	0.0	1.5	0.0	0.0	67
0-99	72.2	17.3	6.8	1.6	1.6	0.5	0.0	0.0	0.0	0.0	0.0	191

INDUSTRIAL ENGINEERING TECHNICIANS AND TECHNOLOGISTS

Nature of the Work:

INDUSTRIAL ENGINEERING TECHNICIANS AND TECHNOLOGISTS provide the technical assistance necessary to determine the most effective way for an organization to use the basic factors of production - people, machines, materials, and energy. To solve organizational, production, and related problems most efficiently, these workers assist industrial engineers who design data processing systems while applying mathematical concepts. They conduct surveys, design, develop, and improve control systems of various types including the development of wage and survey administrative systems and job evaluation programs. Industrial engineering technicians and technologists focus on the practical elements of a job, learning the policy, theory, and design aspects to others.

Training Requirements:

A combination of work experience and education can qualify persons for technician jobs, however, most employers prefer applicants who have had some specialized technical training. Some engineering, science, and mathematics students, who have not completed their degrees are able to qualify for technician and technologist jobs. Workers may learn through on-the-job training, apprenticeship, correspondence schools, or experience gained in the Armed Forces.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$24,385	$24,000	$11,128	$50,000	$19,500	$28,000
Most Experienced	29,182	28,000	14,165	50,000	25,000	34,000
Typical	24,254	24,000	12,771	35,000	20,000	28,000
Entry Level	19,903	20,000	11,128	29,200	17,160	23,000

STATEWIDE

INDUSTRIAL ENGINEERING TECHNICIANS AND TECHNOLOGISTS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	6.1	7.3	12.9	14.7	14.1	14.1	12.3	7.4	3.7	3.1	4.3	163
500+	7.4	11.1	14.8	22.3	7.4	14.8	14.8	3.7	0.0	3.7	0.0	27
250-499	0.0	5.1	10.2	10.3	15.4	12.8	15.4	12.8	5.1	2.6	10.3	39
100-249	11.7	10.0	13.3	13.3	11.7	15.0	8.3	6.7	1.7	5.0	3.3	60
0-99	2.7	2.7	13.5	16.3	21.6	13.5	13.5	5.4	8.1	0.0	2.7	37
MOST EXPERIENCED WORKERS												
ALL	1.9	0.0	7.7	9.6	5.8	11.5	25.0	9.6	9.6	5.8	13.5	52
500+	0.0	0.0	11.1	22.3	11.1	11.1	22.2	11.1	0.0	11.1	0.0	9
250-499	0.0	0.0	0.0	0.0	0.0	8.5	33.3	8.3	8.3	8.3	33.3	12
100-249	5.0	0.0	15.0	10.0	5.0	15.0	20.0	10.0	5.0	5.0	10.0	20
0-99	0.0	0.0	0.0	9.1	9.1	9.1	27.2	9.1	27.3	0.0	9.1	11
TYPICAL WORKERS												
ALL	1.7	7.0	12.3	12.3	22.8	17.5	8.8	12.3	1.8	3.5	0.0	57
500+	0.0	11.1	22.3	22.2	0.0	22.2	22.2	0.0	0.0	0.0	0.0	9
250-499	0.0	7.2	0.0	7.1	28.6	14.3	7.1	28.6	7.1	0.0	0.0	14
100-249	4.8	9.5	19.0	9.5	19.1	19.1	0.0	9.5	0.0	9.5	0.0	21
0-99	0.0	0.0	7.7	15.4	38.4	15.4	15.4	7.7	0.0	0.0	0.0	13
ENTRY LEVEL WORKERS												
ALL	14.8	14.8	18.5	22.2	13.0	13.0	3.7	0.0	0.0	0.0	0.0	54
500+	22.3	22.2	11.1	22.2	11.1	11.1	0.0	0.0	0.0	0.0	0.0	9
250-499	0.0	7.7	30.7	23.1	15.4	15.4	7.7	0.0	0.0	0.0	0.0	13
100-249	26.3	21.1	5.2	21.1	10.5	10.5	5.3	0.0	0.0	0.0	0.0	19
0-99	7.7	7.7	30.7	23.1	15.4	15.4	0.0	0.0	0.0	0.0	0.0	13

INDUSTRIAL ENGINEERS

Nature of the Work:

INDUSTRIAL ENGINEERS are responsible for analyzing an organization's use of labor and other productive resources and for suggesting ways of increasing the operation's efficiency in terms of cost and other goals, such as worker efficiency, work environment, and resource allocation. Typically, they are involved more with issues of business organization than with the technical concerns of other types of engineers.

Training Requirements:

For most beginning jobs, a bachelor's degree in engineering is acceptable, and indeed, for some positions, so is a college degree in natural science or mathematics. Two year programs giving degrees in engineering technology are often sufficient for the practical production analysis done by industrial engineers; however, most employers prefer candidates possess a bachelor's degree. Training in business administration can be helpful. A graduate degree is useful for advancement, and essential for most teaching jobs.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$30,024	$29,182	$13,000	$75,000	$24,500	$35,000
Most Experienced	35,484	34,800	17,000	75,000	30,000	40,000
Typical	30,210	30,000	15,000	60,000	26,000	34,112
Entry Level	24,083	24,000	13,000	40,000	20,280	26,520

STATEWIDE

INDUSTRIAL ENGINEERS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	0.6	2.0	5.7	8.9	9.2	16.9	8.3	14.9	8.0	8.9	16.6	349
500+	0.0	1.2	4.8	4.8	9.5	14.3	8.3	14.3	11.9	10.7	20.2	84
250-499	0.0	1.9	5.8	7.7	11.5	19.2	7.7	17.3	7.7	5.8	15.4	52
100-249	0.8	0.7	6.5	9.4	8.7	17.4	6.5	15.2	8.0	9.4	17.4	138
0-99	1.5	5.3	5.3	13.3	8.0	17.3	12.0	13.3	4.0	8.0	12.0	75
						MOST EXPERIENCED WORKERS						
ALL	0.0	0.8	3.4	0.8	0.8	10.1	6.7	14.3	14.3	10.1	38.7	119
500+	0.0	0.0	0.0	0.0	0.0	10.3	3.5	6.9	13.8	17.2	48.3	29
250-499	0.0	0.0	5.9	0.0	0.0	0.0	5.9	17.6	23.5	5.9	41.2	17
100-249	0.0	0.0	2.1	0.0	2.1	12.8	4.3	17.0	14.9	6.4	40.4	47
0-99	0.0	3.8	7.7	3.9	0.0	11.5	15.4	15.4	7.7	11.5	23.1	26
						TYPICAL WORKERS						
ALL	0.0	0.8	2.6	6.0	6.8	20.5	9.4	23.1	8.6	12.8	9.4	117
500+	0.0	0.0	0.0	3.7	11.1	7.4	11.1	26.0	18.5	11.1	11.1	27
250-499	0.0	0.0	5.5	0.0	0.0	38.9	5.6	33.3	0.0	11.1	5.6	18
100-249	0.0	0.0	4.3	8.5	8.5	14.9	8.5	21.3	8.5	14.9	10.6	47
0-99	0.0	4.0	0.0	8.0	4.0	32.0	12.0	16.0	4.0	12.0	8.0	25
						ENTRY LEVEL WORKERS						
ALL	1.8	4.4	11.5	20.2	20.4	20.4	8.9	7.1	0.9	3.5	0.9	113
500+	0.0	3.6	14.3	10.7	17.8	25.0	10.7	10.7	3.6	3.6	0.0	28
250-499	0.0	5.9	5.9	23.5	35.3	17.6	11.8	0.0	0.0	0.0	0.0	17
100-249	2.3	2.3	13.6	20.5	15.9	25.0	6.8	6.8	0.0	6.8	0.0	44
0-99	4.3	8.3	8.3	29.2	20.8	8.3	8.3	8.3	0.0	0.0	4.2	24

INDUSTRIAL PRODUCTION MANAGERS

Nature of the Work:

INDUSTRIAL PRODUCTION MANAGERS are directly responsible for the operational activities of an organization. A typical day involves planning, organizing, and controlling the operational activities necessary for manufacturing products in accordance with cost, quality, and quantity specifications. The goal of these managers is to direct and coordinate the activities of the industrial production unit as to obtain optimum efficiency and economy of operations and maximize profits.

Training Requirements:

Industrial production managers are not required to have a college degree, however continuing education can accelerate career advancement. People in these jobs often have worked their way up in the organization. Their main qualification is a thorough knowledge of the operating procedure. On-the-job training enables workers with management potential "to learn the ropes," working under the direction of more experienced managers.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$33,354	$31,800	$10,000	$100,000	$25,000	$40,000
Most Experienced	39,841	39,000	15,250	100,000	31,000	46,820
Typical	32,894	31,200	14,000	100,000	25,000	40,000
Entry Level	26,018	25,000	10,000	75,000	20,000	31,100

STATEWIDE

INDUSTRIAL PRODUCTION MANAGERS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $19,999	$20,000 $24,999	$25,000 $29,999	$30,000 $34,999	$35,000 $39,999	$40,000 $44,999	$45,000 $49,999	$50,000 $54,999	$55,000 $59,999	$60,000 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	1.4	7.6	14.2	16.5	18.3	13.6	11.7	6.7	4.7	2.2	3.1	1312
500+	0.0	0.9	6.2	9.8	20.5	15.2	17.0	13.4	9.8	2.7	4.5	112
250-499	0.0	2.3	5.6	13.5	14.6	20.2	10.1	13.5	4.5	10.1	5.6	89
100-249	0.7	4.3	11.4	16.0	19.3	13.4	13.7	8.5	6.2	2.9	3.6	306
0-99	2.0	10.3	17.3	18.0	18.0	12.8	10.3	4.3	3.5	1.0	2.5	805
MOST EXPERIENCED WORKERS												
ALL	0.0	1.1	6.2	10.7	19.2	14.3	16.0	10.7	10.3	4.7	6.8	468
500+	0.0	0.0	0.0	0.0	13.5	8.1	8.1	29.8	24.3	5.4	10.8	37
250-499	0.0	0.0	3.4	3.3	3.3	20.0	13.3	16.7	6.7	20.0	13.3	30
100-249	0.0	0.0	4.7	7.6	18.1	7.6	21.9	12.4	12.4	6.7	8.6	105
0-99	0.0	1.7	7.8	13.7	22.0	16.9	15.2	7.1	8.1	2.4	5.1	296
TYPICAL WORKERS												
ALL	0.5	5.9	14.4	19.6	17.0	15.9	14.8	6.3	2.6	1.3	1.7	459
500+	0.0	0.0	5.4	13.5	2.7	24.3	35.2	10.8	5.4	0.0	2.7	37
250-499	0.0	0.0	3.2	9.7	25.8	19.3	6.5	19.4	3.2	9.7	3.2	31
100-249	0.0	4.5	8.1	18.1	18.9	19.8	15.3	7.2	4.5	1.8	1.8	111
0-99	0.7	7.9	19.3	22.1	17.1	12.9	12.9	3.9	1.4	0.4	1.4	280
ENTRY LEVEL WORKERS												
ALL	4.2	17.4	23.6	20.0	18.7	10.1	2.6	2.3	0.5	0.3	0.3	385
500+	0.0	2.6	13.2	15.8	44.7	13.2	7.9	0.0	0.0	2.6	0.0	38
250-499	0.0	7.1	10.7	28.6	14.3	21.4	10.7	3.6	3.6	0.0	0.0	28
100-249	2.2	8.9	23.4	23.3	21.1	12.2	2.2	5.6	1.1	0.0	0.0	90
0-99	6.1	24.5	27.1	18.3	14.0	7.4	0.9	1.3	0.0	0.0	0.4	229

INDUSTRIAL TRUCK AND TRACTOR OPERATORS

Nature of the Work:

INDUSTRIAL TRUCK AND TRACTOR OPERATORS operate gasoline or electric powered industrial trucks or tractors equipped with fork lift, elevated platform or trailer hitch to move materials in an establishment, warehouse, storage yard, factory, or at a construction site. The trucks are controlled by moving levers and pedals.

Training Requirements:

Qualifications for truck drivers vary considerably depending upon the type of truck and the nature of the employer's business. Preferred applicants are those with good driving records, are at least 21 years old, and have passed a physical examination. In addition, driver's must take a written examination on the Motor Carrier Safety Regulations of the U.S. Department of Transportation.

The recommended training for tractor operators is the completion of a three-year formal apprenticeship. However, most individuals learn the trade beginning as truck drivers or helpers. Courses in driver education and automobile mechanics are helpful as well as experience in operating tractors and other farm machinery.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.16	$7.00	$3.35	$12.50	$5.98	$8.46
Most Experienced	7.93	7.88	3.78	12.50	6.55	9.08
Typical	7.29	7.34	3.75	12.32	6.00	8.30
Entry Level	6.25	6.00	3.35	11.54	5.00	7.27

STATEWIDE

INDUSTRIAL TRUCK AND TRACTOR OPERATORS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	9.9	16.0	20.9	20.9	16.3	9.6	3.5	1.6	1.3	0.0	0.0	374
500+	6.0	14.0	16.0	18.0	22.0	14.0	8.0	2.0	0.0	0.0	0.0	50
250-499	7.2	9.5	19.1	21.4	16.7	7.1	9.5	7.1	2.4	0.0	0.0	42
100-249	8.2	12.4	18.6	25.8	20.6	13.4	0.0	0.0	1.0	0.0	0.0	97
0-99	12.5	20.0	23.8	18.9	12.4	7.0	2.7	1.1	1.6	0.0	0.0	185
MOST EXPERIENCED WORKERS												
ALL	3.3	6.6	22.7	18.9	20.5	15.6	6.6	2.5	3.3	0.0	0.0	122
500+	0.0	0.0	23.5	11.8	35.3	17.6	5.9	5.9	0.0	0.0	0.0	17
250-499	0.0	6.7	13.3	20.0	20.0	13.3	13.3	6.7	6.7	0.0	0.0	15
100-249	3.1	6.3	15.6	25.0	25.0	21.9	0.0	0.0	3.1	0.0	0.0	32
0-99	5.2	8.6	29.3	17.2	13.8	12.1	8.6	1.7	3.5	0.0	0.0	58
TYPICAL WORKERS												
ALL	6.1	17.6	16.8	26.7	18.3	9.9	2.3	1.5	0.8	0.0	0.0	131
500+	0.0	18.7	12.5	25.0	18.8	12.5	12.5	0.0	0.0	0.0	0.0	16
250-499	0.0	7.7	7.7	38.4	23.4	7.7	7.7	7.7	0.0	0.0	0.0	13
100-249	5.9	17.6	11.8	29.4	20.6	14.7	0.0	0.0	0.0	0.0	0.0	34
0-99	8.8	19.1	22.1	23.5	16.2	7.3	0.0	1.5	1.5	0.0	0.0	68
ENTRY LEVEL WORKERS												
ALL	20.7	24.0	23.1	16.5	9.9	3.3	1.7	0.8	0.0	0.0	0.0	121
500+	17.5	23.5	11.8	17.7	11.8	11.8	5.9	0.0	0.0	0.0	0.0	17
250-499	21.4	14.3	35.7	7.3	7.1	0.0	7.1	7.1	0.0	0.0	0.0	14
100-249	16.2	12.9	29.0	22.6	16.1	3.2	0.0	0.0	0.0	0.0	0.0	31
0-99	23.7	32.2	20.3	15.3	6.8	1.7	0.0	0.0	0.0	0.0	0.0	59

INSPECTORS AND RELATED OCCUPATIONS

Nature of the Work:

INSPECTORS AND RELATED WORKERS are responsible for inspecting many different types of materials and products, during the manufacturing process, for their conformance to predetermined standards and specifications by using fixed or preset measuring instruments. They examine materials and products for surface defects such as cracks or pits, and compare the product with a sample model to ensure the completion of the assembly. Performing related tasks such as testing, grading, sorting, and sampling is also among their duties.

Training Requirements:

A high school diploma may not be required if an applicant has qualifying aptitudes or related experience. Many inspectors acquire the necessary skills and experience by working at various production line jobs. After gaining experience and perhaps studying blueprint reading and shop mathemetics, inspectors in entry level jobs usually can advance to more highly skilled inspection work such as supervisors or quality control technicians.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.35	$7.00	$3.35	$21.86	$5.75	$ 8.65
Most Experienced	8.61	8.25	4.10	21.86	6.90	10.00
Typical	7.33	7.20	3.45	18.61	6.00	8.50
Entry Level	6.13	6.00	3.35	15.32	5.00	7.00

STATEWIDE

INSPECTORS AND RELATED OCCUPATIONS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	13.4	15.5	18.8	16.2	13.4	8.4	6.5	3.4	2.2	1.2	1.0	1031
500+	8.0	13.3	23.0	24.8	8.8	10.6	3.5	8.0	0.0	0.0	0.0	113
250-499	9.4	15.9	22.4	23.4	14.0	5.6	6.6	0.9	0.9	0.0	0.9	107
100-249	14.1	15.6	21.2	15.9	12.7	8.5	5.3	1.1	2.1	2.1	1.4	283
0-99	15.0	15.9	15.9	13.1	14.6	8.5	7.8	4.2	3.0	1.1	0.9	528
						MOST EXPERIENCED WORKERS						
ALL	4.1	8.0	14.2	18.0	14.5	13.6	10.7	5.9	5.6	3.0	2.4	338
500+	2.7	5.4	5.4	29.8	10.8	27.0	2.7	16.2	0.0	0.0	0.0	37
250-499	0.0	2.7	20.0	25.7	22.9	8.6	14.3	2.9	0.0	0.0	2.9	35
100-249	4.4	8.8	17.5	18.7	9.9	15.4	9.9	1.1	6.6	5.5	2.2	91
0-99	5.1	9.1	13.1	13.7	16.0	10.9	12.0	6.9	7.4	2.9	2.9	175
						TYPICAL WORKERS						
ALL	10.3	14.9	19.7	17.7	18.0	8.6	5.4	3.7	1.1	0.3	0.3	350
500+	5.4	2.7	29.7	35.2	16.2	2.7	0.0	8.1	0.0	0.0	0.0	37
250-499	0.0	22.2	22.2	30.5	13.9	2.8	5.6	0.0	2.8	0.0	0.0	36
100-249	10.3	16.5	20.6	19.6	15.5	9.3	5.1	2.1	0.0	0.0	1.0	97
0-99	13.3	15.0	16.7	10.4	20.6	10.6	6.7	4.4	1.7	0.6	0.0	180
						ENTRY LEVEL WORKERS						
ALL	25.7	23.6	22.4	12.8	7.6	3.2	3.5	0.6	0.0	0.3	0.3	343
500+	15.4	30.8	33.3	10.2	0.0	2.6	7.7	0.0	0.0	0.0	0.0	39
250-499	27.8	22.2	25.0	13.9	5.5	5.6	0.0	0.0	0.0	0.0	0.0	36
100-249	27.4	20.8	25.3	9.5	12.6	1.1	1.1	0.0	0.0	1.1	1.1	95
0-99	26.6	23.7	17.9	15.0	6.9	4.1	4.6	1.2	0.0	0.0	0.0	173

JANITORS AND CLEANERS, EXCEPT MAIDS AND HOUSE CLEANERS

Nature of the Work:

JANITORS AND CLEANERS, sometimes called custodians, keep office buildings, hospitals, stores, and apartment houses clean and in good condition. Their routine includes necessary maintenance tasks such as fixing leaky faucets, emptying trash, minor painting and carpentry, replenishing bathroom supplies, and mowing lawns. They also see that heating and air-conditioning equipment works properly. On a typical day, a custodian may wet- or dry-mop floors, vacuum carpets, dust furniture, make minor repairs, and exterminate insects and rodents.

Training Requirements:

No special education is required for most janitorial or cleaning jobs, but the beginner should know simple arithmetic and be able to follow instructions. High school shop courses are helpful for minor plumbing or carpentry work.

Most building janitors and cleaners learn their skills on the job. Usually, beginners of routine cleaning are given more complicated duties as they gain experience. In some cities, unions and government agencies have developed programs to teach custodial skills. Students learn how to clean buildings thoroughly and efficiently, and how to operate and maintain machines, such as wet-dry vacuums, buffers, and polishers, that they will use on the job. Instruction in minor electrical, plumbing, and other repairs also is given. As a part of their training, students learn to plan their work, to follow safety and health regulations, to deal with people in the buildings they clean, and to work without supervision.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$5.87	$5.63	$3.25	$13.46	$4.80	$6.73
Most Experienced	6.57	6.39	3.38	13.46	5.50	7.50
Typical	5.97	5.87	3.35	11.82	5.00	6.71
Entry Level	5.09	5.00	3.25	10.31	4.20	5.69

STATEWIDE

JANITORS AND CLEANERS, EXCEPT MAIDS AND HOUSE CLEANERS

HOURLY WAGES

COMPANY SIZE	UNDER $4.00	$4.00 $4.49	$4.50 $4.99	$5.00 $5.49	$5.50 $5.99	$6.00 $6.49	$6.50 $6.99	$7.00 $7.49	$7.50 $7.99	$8.00 $8.49	$8.50 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	6.9	10.2	10.6	14.8	13.7	13.7	8.6	5.5	5.5	4.1	6.4	1083
500+	3.2	2.4	5.5	11.8	12.6	18.1	10.2	6.3	12.6	4.7	12.6	127
250-499	1.7	6.0	6.9	10.4	14.7	18.1	16.4	8.6	6.9	1.7	8.6	116
100-249	6.3	8.8	11.7	15.1	13.6	10.4	9.2	6.6	5.1	6.3	6.9	317
0-99	9.4	13.8	11.9	16.3	14.2	13.6	6.1	4.0	3.6	3.1	4.0	523
MOST EXPERIENCED WORKERS												
ALL	2.3	5.1	7.1	7.9	12.8	17.1	11.4	8.8	8.8	6.8	11.9	352
500+	2.4	0.0	0.0	4.8	2.4	16.7	11.9	11.9	18.9	11.9	19.1	42
250-499	0.0	2.6	2.6	2.6	5.3	21.0	15.8	13.2	18.4	5.3	13.2	38
100-249	1.0	4.8	5.9	10.9	14.9	12.9	11.9	9.9	5.0	7.9	14.9	101
0-99	3.5	7.0	10.5	8.2	15.8	18.7	10.0	6.4	6.4	5.3	8.2	171
TYPICAL WORKERS												
ALL	4.9	7.7	8.2	15.3	15.6	17.2	10.9	5.7	6.6	2.7	5.2	366
500+	2.4	2.4	0.0	7.1	14.3	28.6	14.3	4.7	14.3	2.4	9.5	42
250-499	0.0	5.4	2.7	5.4	19.0	18.9	24.3	13.5	2.7	0.0	8.1	37
100-249	2.7	11.0	5.5	18.4	15.6	11.0	11.0	5.5	8.3	6.4	4.6	109
0-99	7.9	7.3	12.9	17.4	15.2	18.0	7.3	4.5	4.5	1.1	3.9	178
ENTRY LEVEL WORKERS												
ALL	13.4	17.5	16.4	20.8	13.2	6.9	3.6	2.2	1.1	2.7	2.2	365
500+	4.5	4.7	16.3	23.3	20.9	9.3	4.7	2.3	4.7	0.0	9.3	43
250-499	4.9	9.8	14.6	21.9	19.5	14.6	9.8	0.0	0.0	0.0	4.9	41
100-249	14.7	10.3	23.4	15.9	10.3	7.5	4.7	4.7	1.9	4.7	1.9	107
0-99	16.7	27.0	12.6	23.0	11.5	4.0	1.1	1.2	0.0	2.9	0.0	174

LATHE AND TURNING MACHINE TOOL SETTERS AND SET-UP OPERATORS

Nature of the Work:

LATHE AND TURNING MACHINE TOOL SETTERS AND SET-UP OPERATORS are responsible for setting up and operating a lathe by performing a series of machining operations, such as turning, boring, threading, forming, or facing of plastic, metal, or metal workpieces according to the required specifications. They must study blueprints to visualize the machining to be done, and plan the sequence of operations to be performed. Finally, they verify the conformance of the machined work to the original specifications by using fixed gages, calipers, and micrometers.

Training Requirements:

Although a high school diploma is not required, high school or vocational school graduates who have taken courses in mathematics, machine shop, and blueprint reading are preferred. Most of these workers learn these jobs through on-the-job training provided by their employer. Other qualifications include manual dexterity and mechanical aptitude.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 8.53	$8.44	$4.00	$20.00	$7.00	$ 9.80
Most Experienced	10.02	9.50	5.00	20.00	8.50	11.25
Typical	8.59	8.52	4.10	14.01	7.25	9.70
Entry Level	6.88	6.67	4.00	13.37	5.50	8.00

STATEWIDE

LATHE AND TURNING MACHINE TOOL SETTERS AND SET-UP OPERATORS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	4.6	8.1	11.3	15.1	22.4	14.8	9.2	5.1	4.3	1.9	3.2	371
500+	3.0	0.0	3.0	12.1	27.3	27.3	15.1	0.0	6.1	0.0	6.1	33
250-499	0.0	7.9	5.2	15.8	31.6	10.5	7.9	13.2	7.9	0.0	0.0	38
100-249	4.1	2.1	12.2	14.3	28.6	20.4	4.1	6.1	2.0	4.1	2.0	49
0-99	5.6	10.4	13.0	15.5	19.1	12.8	9.6	4.4	4.0	2.0	3.6	251
MOST EXPERIENCED WORKERS												
ALL	0.0	0.8	4.0	9.5	19.1	24.6	11.1	9.5	9.5	4.0	7.9	126
500+	0.0	0.0	0.0	0.0	18.2	36.3	18.2	0.0	18.2	0.0	9.1	11
250-499	0.0	0.0	0.0	0.0	30.7	23.1	15.4	7.7	23.1	0.0	0.0	13
100-249	0.0	0.0	0.0	11.7	23.5	35.3	0.0	11.8	5.9	5.9	5.9	17
0-99	0.0	1.2	5.9	11.7	16.5	21.2	11.7	10.6	7.1	4.7	9.4	85
TYPICAL WORKERS												
ALL	0.8	5.6	9.5	16.6	31.8	14.2	12.7	4.0	2.4	0.8	1.6	126
500+	0.0	0.0	0.0	9.1	36.3	18.2	27.3	0.0	0.0	0.0	9.1	11
250-499	0.0	0.0	8.3	16.7	41.7	8.3	0.0	25.0	0.0	0.0	0.0	12
100-249	0.0	0.0	16.7	5.5	44.4	16.7	11.1	5.6	0.0	0.0	0.0	18
0-99	1.2	8.2	9.4	20.0	27.1	14.1	12.9	1.2	3.5	1.2	1.2	85
ENTRY LEVEL WORKERS												
ALL	13.5	18.5	21.0	19.3	16.0	5.0	3.4	1.7	0.8	0.8	0.0	119
500+	9.1	0.0	9.1	27.2	27.3	27.3	0.0	0.0	0.0	0.0	0.0	11
250-499	0.0	23.1	7.7	30.7	23.1	0.0	7.7	7.7	0.0	0.0	0.0	13
100-249	14.3	7.2	21.4	28.6	14.3	7.1	0.0	0.0	0.0	7.1	0.0	14
0-99	16.1	22.2	24.7	14.8	13.6	2.5	3.7	1.2	1.2	0.0	0.0	81

MACHINE ASSEMBLERS

Nature of the Work:

MACHINE ASSEMBLERS are responsible for the assembling of machines, equipment, and their subassemblies, such as baling pressers, strokers, blowers, and crushers. They must strictly adhere to blueprints and other written and verbal specifications. By using the knowledge they have gained through experience and by maintaining the required standards, machine assemblers also plan assemble procedures. Other duties include aligning components, and testing or assisting in the testing operation of the completed product.

Training Requirements:

Although a high school diploma is not usually required, it is preferred. Some employers look for applicants with mechanical aptitude and prefer those who have taken vocational school courses such as machine shop and blueprint reading. Good eyesight, physical strength, and stamina are also essential qualities.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.83	$8.00	$3.38	$13.75	$6.00	$ 9.70
Most Experienced	8.79	9.38	4.38	13.75	7.00	10.08
Typical	7.90	8.13	3.75	10.85	6.00	9.70
Entry Level	6.82	6.88	3.38	9.70	5.00	8.00

STATEWIDE

MACHINE ASSEMBLERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	9.3	15.1	8.1	16.3	19.8	11.6	14.0	2.3	2.3	1.2	0.0	86
500+	0.0	0.0	0.0	16.7	33.3	25.0	16.7	8.3	0.0	0.0	0.0	12
250-499	16.6	16.7	0.0	16.7	0.0	33.3	16.7	0.0	0.0	0.0	0.0	6
100-249	7.7	15.4	19.2	23.1	15.4	3.8	15.4	0.0	0.0	0.0	0.0	26
0-99	11.9	19.0	4.8	11.9	21.4	9.5	11.9	2.4	4.8	2.4	0.0	42
MOST EXPERIENCED WORKERS												
ALL	3.5	10.3	3.5	17.3	10.3	17.3	20.7	6.8	6.8	3.5	0.0	29
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	12.5	0.0	37.5	12.5	12.5	25.0	0.0	0.0	0.0	0.0	8
0-99	6.7	13.3	6.7	6.7	6.7	19.9	13.3	6.7	13.3	6.7	0.0	15
TYPICAL WORKERS												
ALL	6.6	16.7	6.7	10.0	30.0	10.0	20.0	0.0	0.0	0.0	0.0	30
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	20.0	20.0	10.0	30.0	0.0	20.0	0.0	0.0	0.0	0.0	10
0-99	14.3	14.3	0.0	14.3	28.6	7.1	21.4	0.0	0.0	0.0	0.0	14
ENTRY LEVEL WORKERS												
ALL	18.6	18.5	14.8	22.2	18.5	7.4	0.0	0.0	0.0	0.0	0.0	27
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	25.0	12.5	37.5	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8
0-99	15.5	30.9	7.2	15.5	30.9	0.0	0.0	0.0	0.0	0.0	0.0	13

* NOT PUBLISHABLE

MACHINE FEEDERS AND OFFBEARERS

Nature of the Work:

MACHINE FEEDERS AND OFFBEARERS are responsible for the immediate pre- and post-handling of machined materials. That is, machine feeders feed materials into and offbearers remove materials from machines or equipment that is automatic or tended by other workers. Offbearers may also be required to perform finishing tasks such as trimming, cleaning, or spraying of the materials removed from the machines.

Training Requirements:

Employers do not require a high school diploma, but it is preferred. In addition, there is no formal training requirements for these production workers. Employers, however, seek workers who can do routine work in a quick and efficient manner. Neatness and attention to detail are also important when performing the finishing tasks.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$6.06	$5.75	$3.35	$12.62	$4.70	$7.21
Most Experienced	6.96	6.99	4.10	12.62	5.60	8.00
Typical	6.20	5.93	3.50	12.52	5.00	7.12
Entry Level	5.10	4.57	3.35	11.06	4.00	5.77

STATEWIDE

MACHINE FEEDERS AND OFFBEARERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	29.1	24.9	15.8	14.0	7.6	4.4	2.4	0.8	1.0	0.0	0.0	499
500+	10.0	23.3	10.0	26.7	23.3	6.7	0.0	0.0	0.0	0.0	0.0	30
250-499	7.5	27.5	17.5	22.5	5.0	2.5	10.0	5.0	2.5	0.0	0.0	40
100-249	27.5	22.5	15.0	15.8	9.2	5.0	2.5	1.7	0.8	0.0	0.0	120
0-99	34.3	25.6	16.5	11.0	5.8	4.2	1.6	0.0	1.0	0.0	0.0	309
						MOST EXPERIENCED WORKERS						
ALL	8.7	23.8	17.5	21.9	13.1	8.1	3.8	0.6	2.5	0.0	0.0	160
500+	0.0	20.0	10.0	30.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	10
250-499	0.0	7.1	14.3	42.9	14.3	0.0	14.3	0.0	7.1	0.0	0.0	14
100-249	10.1	15.4	23.1	20.5	12.8	10.3	2.6	2.6	2.6	0.0	0.0	39
0-99	10.3	29.9	16.5	18.5	12.4	7.2	3.1	0.0	2.1	0.0	0.0	97
						TYPICAL WORKERS						
ALL	23.8	26.8	20.2	14.3	7.1	4.8	1.2	1.2	0.6	0.0	0.0	168
500+	10.0	20.0	10.0	20.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	10
250-499	0.0	30.7	23.1	23.1	0.0	7.7	7.7	7.7	0.0	0.0	0.0	13
100-249	22.5	30.0	12.5	17.5	12.5	2.5	0.0	2.5	0.0	0.0	0.0	40
0-99	28.6	25.7	23.8	11.4	2.9	5.7	0.9	0.0	1.0	0.0	0.0	105
						ENTRY LEVEL WORKERS						
ALL	53.2	24.0	10.0	6.4	2.9	0.6	2.3	0.6	0.0	0.0	0.0	171
500+	20.0	30.0	10.0	30.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	10
250-499	23.1	46.1	15.4	0.0	0.0	0.0	7.7	7.7	0.0	0.0	0.0	13
100-249	48.8	21.9	9.8	9.8	2.4	2.4	4.9	0.0	0.0	0.0	0.0	41
0-99	61.7	21.5	9.4	3.7	2.8	0.0	0.9	0.0	0.0	0.0	0.0	107

MACHINE FORMING OPERATORS AND TENDERS, METAL AND PLASTIC

Nature of the Work:

METAL AND PLASTIC MACHINE FORMING OPERATORS AND TENDERS operate or tend forming machines that perform any combination of milling, planing, shaping, grooving, or profiling metal or plastic workpieces according to blueprint specifications. Most operators only tend machines performing simple, repetitive operations that can be learned relatively quickly. Typically, these operators place rough metal stock in a machine tool on which the speed and operation sequence already have been set.

Skilled machine tool operators plan and set up the correct sequence of machining operations according to blueprints, layouts, or other instructions. They adjust speed, feed, and other controls and select the proper cutting instruments or tools for each operation. When their machines are not working properly, major adjustments are made by skilled machine workers.

Training Requirements:

Employers do not require a high school diploma. However, they often prefer high school or vocational school graduates who have taken courses in mathematics, machine shop, and blueprint reading. Most workers learn these jobs through on-the-job training provided by their employer. Persons interested in these jobs should have manual dexterity and be mechanically inclined to use the tools and machinery required in their work. Physical stamina and strength are also essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.06	$7.00	$3.45	$16.38	$5.48	$8.41
Most Experienced	7.98	8.09	4.35	16.38	6.75	9.18
Typical	7.33	7.00	3.95	12.25	6.00	8.41
Entry Level	5.99	6.00	3.45	11.06	4.50	7.00

STATEWIDE

MACHINE FORMING OPERATORS AND TENDERS, METAL AND PLASTIC

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	18.5	12.0	17.5	17.5	18.5	5.5	6.0	2.0	1.5	0.5	0.5	200
500+	16.7	0.0	5.4	16.7	38.9	11.1	5.6	0.0	0.0	5.6	0.0	18
250-499	5.4	16.7	22.2	16.7	16.7	0.0	5.6	11.1	5.6	0.0	0.0	18
100-249	5.9	17.7	29.4	20.6	17.7	2.9	2.9	0.0	2.9	0.0	0.0	34
0-99	23.8	11.5	15.4	16.9	16.2	6.2	6.9	1.5	0.8	0.0	0.8	130
						MOST EXPERIENCED WORKERS						
ALL	11.5	4.9	13.2	13.2	26.2	8.2	14.7	1.6	3.3	1.6	1.6	61
500+	16.6	0.0	0.0	0.0	33.3	16.7	16.7	0.0	0.0	16.7	0.0	6
250-499	0.0	0.0	33.3	16.6	16.7	0.0	16.7	0.0	16.7	0.0	0.0	6
100-249	0.0	9.1	18.2	9.1	45.4	0.0	9.1	0.0	9.1	0.0	0.0	11
0-99	15.8	5.3	10.5	15.8	21.1	10.5	15.8	2.6	0.0	0.0	2.6	38
						TYPICAL WORKERS						
ALL	13.1	11.6	18.8	18.8	24.6	5.8	2.9	2.9	1.5	0.0	0.0	69
500+	16.6	0.0	0.0	0.0	66.7	16.7	0.0	0.0	0.0	0.0	0.0	6
250-499	0.0	16.7	33.3	0.0	33.3	0.0	0.0	16.7	0.0	0.0	0.0	6
100-249	0.0	18.2	36.3	27.3	9.1	9.1	0.0	0.0	0.0	0.0	0.0	11
0-99	17.3	10.9	15.2	21.7	21.7	4.4	4.4	2.2	2.2	0.0	0.0	46
						ENTRY LEVEL WORKERS						
ALL	30.0	18.6	20.0	20.0	5.7	2.9	1.4	1.4	0.0	0.0	0.0	70
500+	16.6	0.0	16.7	50.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	6
250-499	16.7	33.3	0.0	33.3	0.0	0.0	0.0	16.7	0.0	0.0	0.0	6
100-249	16.7	25.0	33.3	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12
0-99	37.0	17.4	19.6	13.0	6.5	4.3	2.2	0.0	0.0	0.0	0.0	46

MACHINE SETTERS, OPERATORS, AND TENDERS - PRINTING

Nature of the Work:

PRINTING MACHINE SETTERS, OPERATORS, AND TENDERS prepare and operate printing machinery such as offset printing presses, printing machines, and photoengraving, and lithographic equipment. Before actually starting the press, these operators set it up and adjust it to ensure that the printing impressions are distinct and uniform. Press operators first insert and lock type setups or plates into the press bed and tighten the locking mechanism. The operators then level the press plates by placing pieces of paper that are exactly the right thickness underneath low areas of the plates. Press operators also adjust control margins and the flow of ink into the inking roller.

Training Requirements:

A high school diploma is not required. However, employers often prefer high school or vocational school graduates who have a course background in printing. Most press operators learn their trade through apprenticeship or on-the-job. The apprenticeship period in commercial shops is four years for press operators.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 8.04	$ 7.50	$3.35	$18.00	$6.00	$ 9.65
Most Experienced	10.26	10.00	4.40	18.00	8.00	12.00
Typical	8.04	8.00	3.50	15.00	6.50	9.44
Entry Level	5.87	5.90	3.35	11.00	4.68	6.80

STATEWIDE

MACHINE SETTERS, OPERATORS, AND TENDERS - PRINTING

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	11.9	13.4	14.9	14.9	11.1	10.4	6.7	4.8	4.1	2.2	5.6	269
500+	5.4	5.6	22.2	11.1	16.7	27.8	0.0	5.6	0.0	0.0	5.6	18
250-499	14.3	9.5	23.8	9.5	4.7	4.8	14.3	4.8	0.0	9.5	4.8	21
100-249	9.8	14.8	13.1	24.6	11.5	6.6	1.6	6.6	4.9	1.6	4.9	61
0-99	13.0	14.2	13.6	12.4	11.3	10.7	8.3	4.1	4.7	1.8	5.9	169
MOST EXPERIENCED WORKERS												
ALL	1.1	4.6	6.9	12.6	9.2	13.8	11.5	11.5	9.2	3.5	16.1	87
500+	0.0	0.0	0.0	16.6	16.7	33.3	0.0	16.7	0.0	0.0	16.7	6
250-499	0.0	0.0	33.3	0.0	0.0	0.0	16.6	16.7	0.0	16.7	16.7	6
100-249	0.0	9.5	9.5	14.3	14.3	4.7	4.8	14.3	9.5	4.8	14.3	21
0-99	1.7	3.7	3.7	13.0	7.4	16.7	14.8	9.3	11.1	1.9	16.7	54
TYPICAL WORKERS												
ALL	4.3	14.9	10.8	19.4	19.4	14.0	7.5	2.2	3.2	3.2	1.1	93
500+	0.0	16.7	0.0	16.7	33.3	33.3	0.0	0.0	0.0	0.0	0.0	6
250-499	0.0	28.5	0.0	14.3	0.0	14.3	28.6	0.0	0.0	14.3	0.0	7
100-249	0.0	23.8	4.8	28.6	18.9	14.3	0.0	4.8	4.8	0.0	0.0	21
0-99	6.8	10.2	15.1	17.0	20.3	11.9	8.5	1.7	3.4	3.4	1.7	59
ENTRY LEVEL WORKERS												
ALL	30.3	20.2	27.0	12.4	4.5	3.4	1.1	1.1	0.0	0.0	0.0	89
500+	16.6	0.0	66.7	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	6
250-499	37.5	0.0	37.5	12.5	12.5	0.0	0.0	0.0	0.0	0.0	0.0	8
100-249	31.6	10.5	26.3	31.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19
0-99	30.3	28.6	21.4	7.1	5.4	3.6	1.8	1.8	0.0	0.0	0.0	56

MACHINE SETTERS, OPERATORS, AND TENDERS - TEXTILES

Nature of the Work:

TEXTILE MACHINE SETTERS, OPERATORS, AND TENDERS are responsible for setting up, setting up and operating, operating, or tending textiles machinery such as extruding machines, bleaching and dyeing machines, sewing machines, and pressing machines. They must adjust the speed, feed, and other controls on the machine according to the specifications of a particular product or job. Then they test the machines to make certain they are functioning properly and producing parts that conform to job specifications. It is also their job to control and monitor machines and equipment and make necessary adjustments during production.

Training Requirements:

Although a high school diploma is not necessary, employers prefer graduates of high school or vocational school whose curriculum included mathematics, machine shop, and blueprint reading. Manual dexterity and mechanical inclination are both important qualities for persons interested in this work. On-the-job training is usually provided by employers to teach the skills necessary to perform the job.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$6.01	$5.60	$3.35	$14.50	$4.50	$7.30
Most Experienced	7.35	7.30	4.60	14.50	5.85	8.80
Typical	5.96	5.60	3.75	12.50	4.90	7.00
Entry Level	4.86	4.46	3.35	10.50	3.90	5.00

STATEWIDE

MACHINE SETTERS, OPERATORS, AND TENDERS - TEXTILES

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	34.2	19.7	15.4	11.4	10.2	5.9	2.0	0.4	0.4	0.0	0.4	254
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	10.0	20.0	0.0	30.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	10
100-249	28.6	12.5	21.4	8.9	12.5	10.7	3.6	1.8	0.0	0.0	0.0	56
0-99	37.9	22.2	14.6	9.7	8.1	4.9	1.6	0.0	0.5	0.0	0.5	185
MOST EXPERIENCED WORKERS												
ALL	7.5	18.5	16.3	13.8	21.3	15.0	5.0	1.3	0.0	0.0	1.3	80
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	5.9	11.8	17.5	5.9	17.7	23.5	11.8	5.9	0.0	0.0	0.0	17
0-99	8.6	22.4	17.3	15.5	17.2	13.8	3.5	0.0	0.0	0.0	1.7	58
TYPICAL WORKERS												
ALL	27.4	26.2	18.9	19.1	4.8	2.4	0.0	0.0	1.2	0.0	0.0	84
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	26.3	10.5	26.3	21.1	10.5	5.3	0.0	0.0	0.0	0.0	0.0	19
0-99	29.5	31.2	18.0	14.8	3.3	1.6	0.0	0.0	1.6	0.0	0.0	61
ENTRY LEVEL WORKERS												
ALL	64.5	14.4	11.1	2.2	5.6	1.1	1.1	0.0	0.0	0.0	0.0	90
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	50.0	15.0	20.0	0.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0	20
0-99	71.2	13.6	9.1	0.0	4.6	0.0	1.5	0.0	0.0	0.0	0.0	66

* NOT PUBLISHABLE

MACHINE SETTERS, OPERATORS, AND TENDERS - WOOD

Nature of the Work:

WOOD MACHINE SETTERS, OPERATORS, AND TENDERS adjust the speed, feed, and other controls on wood sawing or woodworking machines according to the specifications of the type of wood or particular job to be performed. Then they test the machines to make certain they are functioning properly and producing parts that conform to job specifications. After this determination has been made, semiskilled machine operators begin production. It is their job to tend and monitor machines and equipment and make necessary adjustments during production.

Training Requirements:

Employers do not require a high school diploma. However, they often prefer high school or vocational school graduates who have taken courses in mathematics, machine shop, and blueprint reading. Most workers learn these jobs through on-the-job training provided by their employer. Persons interested in these jobs should have manual dexterity and be mechanically inclined to use the tools and machinery required in their work. Physical stamina and strength are also essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.06	$6.50	$3.35	$15.65	$5.15	$ 8.50
Most Experienced	8.34	7.50	4.50	15.65	7.00	10.00
Typical	7.19	6.50	3.71	15.55	5.50	8.00
Entry Level	5.60	5.00	3.35	15.45	4.00	6.00

STATEWIDE

MACHINE SETTERS, OPERATORS, AND TENDERS - WOOD

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	16.9	19.4	17.7	16.1	5.7	10.5	8.1	0.0	1.6	0.0	4.0	124
500+	0.0	16.6	0.0	16.7	0.0	50.0	16.7	0.0	0.0	0.0	0.0	6
250-499	**	**	**	**	**	**	**	**	**	**	**	**
100-249	16.7	16.7	27.8	11.1	5.4	0.0	11.1	0.0	5.6	0.0	5.6	18
0-99	18.0	20.0	17.0	17.0	6.0	10.0	7.0	0.0	1.0	0.0	4.0	100
MOST EXPERIENCED WORKERS												
ALL	2.4	9.8	12.2	29.3	7.3	12.2	19.5	0.0	0.0	0.0	7.3	41
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	**	**	**	**	**	**	**	**	**	**	**	**
100-249	0.0	16.6	16.7	33.3	0.0	0.0	16.7	0.0	0.0	0.0	16.7	6
0-99	3.0	9.1	12.1	30.3	9.1	12.1	18.2	0.0	0.0	0.0	6.1	33
TYPICAL WORKERS												
ALL	4.6	23.3	30.2	11.6	7.0	14.0	2.3	0.0	4.7	0.0	2.3	43
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	**	**	**	**	**	**	**	**	**	**	**	**
100-249	16.6	0.0	50.0	0.0	16.7	0.0	0.0	0.0	16.7	0.0	0.0	6
0-99	2.7	28.6	28.6	11.4	5.7	14.3	2.9	0.0	2.9	0.0	2.9	35
ENTRY LEVEL WORKERS												
ALL	45.0	25.0	10.0	7.5	2.5	5.0	2.5	0.0	0.0	0.0	2.5	40
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	**	**	**	**	**	**	**	**	**	**	**	**
100-249	33.3	33.3	16.7	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	6
0-99	50.0	21.9	9.4	9.4	3.1	3.1	0.0	0.0	0.0	0.0	3.1	32

* NOT PUBLISHABLE
** NO RESPONSES RECEIVED

MACHINE TOOL CUTTING OPERATORS AND TENDERS

Nature of the Work:

MACHINE TOOL CUTTING OPERATORS AND TENDERS operate or tend a power shear that cuts sheets of material, such as paper, pressboard, fore, cardboard, cork, or plastic material to specified dimensions for items, such as cartons, wrappers, labels, business forms or gaskets. They adjust the guides on the machine to regulate the width of the cut and to reposition the material to trim or square the edges to predetermined specifications.

Training Requirements:

Employers do not require a high school diploma. However, they often prefer high school or vocational school graduates who have taken courses in mathematics, machine shop, and blueprint reading. Most workers learn these jobs through on-the-job training provided by their employer. Persons interested in these jobs should have manual dexterity and be mechanically inclined to use the tools and machinery required in their work. Physical stamina and strength are also essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$6.91	$6.46	$3.35	$14.50	$5.29	$8.05
Most Experienced	7.85	7.41	4.35	14.50	6.25	9.00
Typical	7.11	6.50	3.85	12.15	5.95	8.00
Entry Level	5.81	5.20	3.35	11.39	4.57	6.50

STATEWIDE

MACHINE TOOL CUTTING OPERATORS AND TENDERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	14.7	19.8	24.1	12.9	11.2	4.3	6.5	3.9	1.3	0.4	0.9	232
500+	0.0	0.0	0.0	0.0	33.4	11.1	11.1	33.3	0.0	11.1	0.0	9
250-499	0.0	15.0	20.0	15.0	20.0	0.0	30.0	0.0	0.0	0.0	0.0	20
100-249	4.2	12.5	20.8	25.0	8.3	0.0	12.5	8.3	4.2	0.0	4.2	24
0-99	18.4	22.4	26.3	11.7	9.5	5.0	2.8	2.2	1.1	0.0	0.6	179
						MOST EXPERIENCED WORKERS						
ALL	6.4	10.3	23.1	17.8	15.4	5.1	10.3	6.4	1.3	1.3	2.6	78
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	0.0	0.0	0.0	16.7	33.3	0.0	50.0	0.0	0.0	0.0	0.0	6
100-249	0.0	0.0	28.5	14.3	14.3	0.0	14.3	0.0	14.3	0.0	14.3	7
0-99	8.1	12.9	25.8	19.2	12.9	6.5	6.5	6.5	0.0	0.0	1.6	62
						TYPICAL WORKERS						
ALL	9.3	17.3	30.7	12.0	12.0	5.3	6.7	4.0	2.7	0.0	0.0	75
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	0.0	14.3	28.5	0.0	28.6	0.0	28.6	0.0	0.0	0.0	0.0	7
100-249	0.0	11.1	22.3	22.2	11.1	0.0	22.2	11.1	0.0	0.0	0.0	9
0-99	12.5	19.7	33.9	12.5	8.9	7.1	1.8	0.0	3.6	0.0	0.0	56
						ENTRY LEVEL WORKERS						
ALL	27.8	31.7	19.0	8.9	6.3	2.5	2.5	1.3	0.0	0.0	0.0	79
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	0.0	28.5	28.6	28.6	0.0	0.0	14.3	0.0	0.0	0.0	0.0	7
100-249	12.5	25.0	12.5	37.5	0.0	0.0	0.0	12.5	0.0	0.0	0.0	8
0-99	34.4	34.4	19.7	3.3	6.6	1.6	0.0	0.0	0.0	0.0	0.0	61

* NOT PUBLISHABLE

MACHINISTS

Nature of the Work:

MACHINISTS are responsible for setting up, operating, fitting, and assembling parts. They use these parts to make or repair metal parts, mechanisms, tools or machines of an establishment. These processes are accomplished by applying the knowledge of mechanics, shop mathematics, metal properties, and layout machining procedures. Machinists study specifications, such as blueprints, sketches, or descriptions of the parts to be replaced, and then plan the sequence of operations to be performed.

Training Requirements:

A high school or vocational school education, including mathematics, physics, or machine shop training, is desirable. Many machinists learn this trade on-the-job, however, a four year apprenticeship is considered the best way to learn the machinist trade.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 9.16	$ 9.06	$3.00	$18.75	$7.75	$10.74
Most Experienced	10.90	10.96	4.50	18.75	9.68	12.00
Typical	9.31	9.25	3.75	15.30	8.13	10.41
Entry Level	7.27	7.38	3.00	14.86	6.00	8.50

STATEWIDE

MACHINISTS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	2.6	5.8	8.7	11.4	17.7	16.0	14.3	11.0	6.7	3.3	2.5	792
500+	0.0	1.0	3.8	9.6	15.4	22.1	16.4	18.3	6.7	4.8	1.9	104
250-499	0.0	3.2	3.3	13.0	17.4	16.3	17.4	15.2	8.7	3.3	2.2	92
100-249	1.4	4.2	9.8	9.1	22.3	14.7	12.6	11.9	7.0	2.1	4.9	143
0-99	4.2	7.9	10.6	12.1	16.8	15.0	13.7	8.2	6.2	3.3	2.0	453
MOST EXPERIENCED WORKERS												
ALL	0.4	0.0	1.5	3.1	9.6	14.6	20.8	20.4	14.2	9.2	6.2	260
500+	0.0	0.0	0.0	0.0	8.6	14.3	14.3	25.7	17.1	14.3	5.7	35
250-499	0.0	0.0	0.0	6.6	6.7	10.0	23.3	16.7	20.0	10.0	6.7	30
100-249	0.0	0.0	2.1	0.0	14.9	10.7	21.3	25.5	8.5	6.4	10.6	47
0-99	0.7	0.0	2.0	4.1	8.8	16.9	21.6	18.2	14.2	8.8	4.7	148
TYPICAL WORKERS												
ALL	0.4	2.2	5.1	10.6	23.8	23.5	16.5	11.0	5.1	0.7	1.1	273
500+	0.0	0.0	0.0	3.0	23.5	17.7	23.5	29.4	2.9	0.0	0.0	34
250-499	0.0	0.0	3.1	6.2	18.8	25.0	21.9	21.9	3.1	0.0	0.0	32
100-249	0.0	0.0	10.2	6.1	24.5	22.4	14.3	8.2	10.2	0.0	4.1	49
0-99	0.6	3.8	5.0	14.6	24.7	24.7	14.6	5.7	4.4	1.3	0.6	158
ENTRY LEVEL WORKERS												
ALL	7.3	15.4	19.7	20.5	19.3	9.7	5.4	1.5	0.8	0.0	0.4	259
500+	0.0	2.9	11.4	25.7	14.3	34.3	11.4	0.0	0.0	0.0	0.0	35
250-499	0.0	10.0	6.6	26.7	26.7	13.3	6.7	6.7	3.3	0.0	0.0	30
100-249	4.3	12.8	17.0	21.3	27.7	10.6	2.1	2.1	2.1	0.0	0.0	47
0-99	11.6	20.4	25.2	17.7	16.3	2.7	4.8	0.6	0.0	0.0	0.7	147

MAINTENANCE REPAIRERS, GENERAL UTILITY

Nature of the Work:

GENERAL UTILITY MAINTENANCE REPAIRERS perform work involving two or more maintenance skills to keep the machines, mechanical equipment, and/or structure of and establishment in repair. This occupation is generally found in small establishments where specialization in maintenance work is impractical. The duties of these workers are rather extensive and may involve pipefitting, boilermaking, insulating, welding, machine and equipment repairing, carpentry, and electrical work as well as planning and laying out of work relating to repairs; repairing electrical and/or mechanical equipment; installing, aligning, and balacing new equipment; and repairing buildings, floors, or stairs.

Training Requirements:

Training for most maintenance repairer occupations require both classroom instruction in machine operation and practice in repair work. Employers prefer high school graduates, who have taken courses in shop math, blueprint reading, drafting, woodworking, metal working, and electricity, which give students basic mechanical knowledge and skills. Training in specific areas is available through vocational programs. New maintenance repairers usually receive additional on-the-job training from their employer.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.39	$8.34	$3.35	$18.00	$7.00	$ 9.81
Most Experienced	9.59	9.63	5.00	18.00	8.14	10.83
Typical	8.45	8.50	4.50	14.01	7.14	9.66
Entry Level	7.12	7.00	3.35	13.49	5.85	8.34

STATEWIDE

MAINTENANCE REPAIRERS, GENERAL UTILITY

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	3.4	8.1	12.4	16.4	19.7	16.7	12.3	6.0	3.2	0.9	0.9	788
500+	1.2	9.2	4.6	13.8	24.1	19.5	12.6	10.3	3.5	1.2	0.0	87
250-499	1.2	4.9	7.3	15.9	17.1	23.2	13.4	14.6	1.2	1.2	0.0	82
100-249	3.2	6.8	10.9	18.2	22.7	19.1	10.9	3.2	2.3	1.3	1.4	220
0-99	4.5	9.3	16.1	16.0	17.5	13.5	12.8	4.8	4.0	0.5	1.0	399
MOST EXPERIENCED WORKERS												
ALL	0.0	1.5	6.1	11.4	17.9	20.9	18.6	11.4	8.0	1.9	2.3	263
500+	0.0	3.4	3.3	3.3	20.0	20.0	13.3	26.7	6.7	3.3	0.0	30
250-499	0.0	0.0	3.5	6.9	17.2	17.2	24.1	24.1	3.5	3.5	0.0	29
100-249	0.0	0.0	5.5	12.5	18.1	34.7	12.5	5.6	6.9	1.4	2.8	72
0-99	0.0	2.3	7.6	13.6	17.4	14.4	22.0	8.3	9.9	1.5	3.0	132
TYPICAL WORKERS												
ALL	1.5	5.3	12.8	18.4	21.4	19.2	13.9	5.6	1.5	0.0	0.4	266
500+	0.0	3.7	3.7	14.8	18.5	33.4	18.5	3.7	3.7	0.0	0.0	27
250-499	0.0	8.0	4.0	16.0	16.0	28.0	16.0	12.0	0.0	0.0	0.0	25
100-249	0.0	5.4	13.5	20.3	28.4	13.5	13.5	4.0	0.0	0.0	1.4	74
0-99	2.8	5.0	15.7	18.6	19.3	17.9	12.9	5.7	2.1	0.0	0.0	140
ENTRY LEVEL WORKERS												
ALL	8.9	17.8	18.5	19.3	19.7	10.0	4.2	0.8	0.0	0.8	0.0	259
500+	3.3	20.0	6.7	23.3	33.3	6.7	6.7	0.0	0.0	0.0	0.0	30
250-499	3.6	7.1	14.3	25.0	17.9	25.0	0.0	7.1	0.0	0.0	0.0	28
100-249	9.4	14.9	13.5	21.6	21.6	9.5	6.8	0.0	0.0	2.7	0.0	74
0-99	11.0	21.1	25.2	15.8	15.8	7.9	3.2	0.0	0.0	0.0	0.0	127

MECHANIC AND REPAIRER HELPERS

Nature of the Work:

MECHANIC AND REPAIRER HELPERS aid mechanics and repairers in maintenance, parts replacement, and repair vehicles, industrial machinery, and electrical and electronic equipment. They also perform duties such as furnishing tools, materials and supplies to other workers; cleaning the work area, machines, and tools; and holding materials or tools for other workers.

Training Requirements:

Employers prefer high school graduates, but frequently hire those without diplomas if they can read and write adequately. Most mechanics and repairers acquire their skills on-the-job. Formal mechanic training acquired in high school, vocational or techanicl school, or in the Armed Forces is an asset.

Mechanical aptitude and manual skills are essential. Also needed are reading and writing skills in order to consult repair and technical manuals, read work orders, and write parts lists and descriptions of their work. They must also be capable of handling heavy or unweildy parts or components.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.39	$7.10	$3.50	$14.88	$6.00	$8.50
Most Experienced	8.37	8.08	4.25	14.88	7.00	9.50
Typical	7.41	7.10	4.00	14.52	6.10	8.45
Entry Level	6.39	6.18	3.50	12.41	5.00	7.33

STATEWIDE

MECHANIC AND REPAIRER HELPERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	11.0	13.2	20.0	21.3	13.6	8.1	6.2	2.2	2.9	0.4	1.1	273
500+	0.0	17.8	15.6	20.0	24.4	11.1	6.7	4.4	0.0	0.0	0.0	45
250-499	3.0	9.1	15.1	12.1	15.2	12.1	15.2	9.1	9.1	0.0	0.0	33
100-249	6.5	11.7	23.4	28.5	14.3	7.8	2.6	0.0	5.2	0.0	0.0	77
0-99	20.3	13.6	21.2	19.5	8.5	5.9	5.9	0.8	0.9	0.9	2.5	118
MOST EXPERIENCED WORKERS												
ALL	4.4	6.6	14.3	18.6	24.2	8.8	9.9	3.3	6.6	1.1	2.2	91
500+	0.0	6.7	13.4	13.3	33.3	13.3	13.3	6.7	0.0	0.0	0.0	15
250-499	0.0	0.0	0.0	9.1	36.3	0.0	18.2	9.1	27.3	0.0	0.0	11
100-249	0.0	7.7	15.4	23.1	26.9	7.7	7.7	0.0	11.5	0.0	0.0	26
0-99	10.3	7.7	17.8	20.5	15.4	10.3	7.7	2.6	0.0	2.6	5.1	39
TYPICAL WORKERS												
ALL	6.7	12.2	23.3	26.7	13.3	8.9	4.5	2.2	1.1	0.0	1.1	90
500+	0.0	13.4	20.0	13.3	33.3	13.3	0.0	6.7	0.0	0.0	0.0	15
250-499	0.0	9.1	9.1	27.2	9.1	9.1	27.3	9.1	0.0	0.0	0.0	11
100-249	4.0	12.0	28.0	32.0	12.0	12.0	0.0	0.0	0.0	0.0	0.0	25
0-99	12.8	12.8	25.6	28.2	7.7	5.1	2.6	0.0	2.6	0.0	2.6	39
ENTRY LEVEL WORKERS												
ALL	21.7	20.6	22.8	18.5	3.3	6.5	4.4	1.1	1.1	0.0	0.0	92
500+	0.0	33.3	13.3	33.3	6.7	6.7	6.7	0.0	0.0	0.0	0.0	15
250-499	9.1	18.2	36.3	0.0	0.0	27.3	0.0	9.1	0.0	0.0	0.0	11
100-249	15.4	15.4	26.9	30.8	3.7	3.9	0.0	0.0	3.9	0.0	0.0	26
0-99	37.5	20.0	20.0	10.0	2.5	2.5	7.5	0.0	0.0	0.0	0.0	40

MECHANICAL ENGINEERING TECHNICIANS AND TECHNOLOGISTS

Nature of the Work:

MECHANICAL ENGINEERING TECHNICIANS AND TECHNOLOGISTS help develop and test machinery under the supervision of engineering and scientific staff. In design and development, they make freehand sketches and rough layouts of proposed machinery, equipment, or parts, requiring a knowledge of mechanical principles involving tolerance, stress, strain, friction, and vibration factors. In planning and testing machinery and equipment for performance, durability and efficiency, technicians record data, make computations, plot graphs, analyze results, and write reports sometimes recommending design changes to improve performance. This job often requires skill in the use of complex instruments, test equipment, and gauges as well as in the preparation and interpretation of drawings. In production, technicians frequently help estimate labor costs and equipment in manufacturing departments, and work with engineers to eliminate production delays.

Training Requirements:

Although not all employers require a college degree, some post-secondary education is becoming more and more important in order to get engineering technicians' and technologists' positions. Most employers prefer specialized technical training in mechanical engineering or a related technology. This training is available at colleges and universities, as well as at technical institutes, vocational-technical schools, and some junior and community colleges. Technicians and technologists should have a strong background in mathematics and science.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$21,302	$20,200	$10,400	$42,456	$17,056	$25,740
Most Experienced	25,912	26,000	15,000	42,456	22,000	28,340
Typical	21,445	20,500	13,000	40,000	18,000	24,000
Entry Level	16,466	16,000	10,400	30,000	13,120	18,304

STATEWIDE

MECHANICAL ENGINEERING TECHNICIANS AND TECHNOLOGISTS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	11.4	16.9	16.4	18.9	8.5	11.4	7.5	5.5	0.5	1.0	2.0	201
500+	8.5	14.9	17.0	21.3	10.6	14.9	8.5	4.3	0.0	0.0	0.0	47
250-499	8.0	16.0	20.0	16.0	8.0	12.0	8.0	4.0	0.0	0.0	8.0	25
100-249	10.0	15.0	20.0	11.6	11.7	13.3	10.0	6.7	0.0	0.0	1.7	60
0-99	15.9	20.3	11.6	24.6	4.2	7.3	4.4	5.8	1.5	2.9	1.5	69
MOST EXPERIENCED WORKERS												
ALL	0.0	1.5	9.1	19.7	10.6	24.2	18.2	7.6	1.5	3.0	4.6	66
500+	0.0	0.0	18.6	12.5	18.8	18.8	18.8	12.5	0.0	0.0	0.0	16
250-499	0.0	12.5	12.5	0.0	0.0	37.5	25.0	0.0	0.0	0.0	12.5	8
100-249	0.0	0.0	5.2	5.3	10.5	31.6	31.6	10.5	0.0	0.0	5.3	19
0-99	0.0	0.0	4.1	43.5	8.7	17.4	4.4	4.4	4.4	8.7	4.4	23
TYPICAL WORKERS												
ALL	1.4	18.6	20.0	25.7	14.3	7.2	4.3	7.1	0.0	0.0	1.4	70
500+	0.0	13.4	13.3	33.3	13.3	20.0	6.7	0.0	0.0	0.0	0.0	15
250-499	11.1	0.0	11.1	33.4	22.2	0.0	0.0	11.1	0.0	0.0	11.1	9
100-249	0.0	13.1	30.4	17.4	21.7	8.7	0.0	8.7	0.0	0.0	0.0	23
0-99	0.0	34.8	17.4	26.1	4.3	0.0	8.7	8.7	0.0	0.0	0.0	23
ENTRY LEVEL WORKERS												
ALL	33.8	30.8	20.0	10.8	0.0	3.1	0.0	1.5	0.0	0.0	0.0	65
500+	25.0	31.1	18.8	18.8	0.0	6.3	0.0	0.0	0.0	0.0	0.0	16
250-499	12.5	37.5	37.5	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8
100-249	33.4	33.3	22.2	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18
0-99	47.8	26.0	13.0	4.4	0.0	4.4	0.0	4.4	0.0	0.0	0.0	23

MECHANICAL ENGINEERS

Nature of the Work:

MECHANICAL ENGINEERS plan and design electro-mechanical systems, such as instruments, controls, jet and rocket engines, and mechanical, hydraulic, thermal, or heat-transfer systems, as well as power-using systems such as refrigeration systems, machine tools, printing presses, and elevators. The work of mechanical engineers is very diverse and varies from industry to industry. Many specialties have developed including marine equipment, motor vehicles, energy conversion systems, instrumentation, heating, ventilating and air-conditioning, and construction. In addition, the mechanical engineer oversees the installation of equipment, as well as its repair and maintenance.

Training Requirements:

A bachelor's degree in engineering is required for most entry-level positions. A two to four year program in engineering technology can provide practical experience in this field. However, employers generally consider this training only sufficient for a technician's position. Since mechanical engineers must keep up to date on new technologies and methods of analysis, those who hold graduate degrees are more likely candidates for advancement.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$31,452	$30,000	$10,000	$130,000	$25,000	$36,474
Most Experienced	38,289	37,000	12,500	130,000	32,200	42,000
Typical	31,259	30,910	12,000	59,880	27,800	35,000
Entry Level	24,538	24,775	10,000	41,000	21,736	27,000

STATEWIDE

MECHANICAL ENGINEERS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	1.9	2.5	1.7	8.7	7.9	13.7	8.0	16.1	8.0	9.7	21.8	597
500+	1.1	0.0	1.1	3.3	7.8	14.5	6.7	13.3	14.4	8.9	28.9	90
250-499	0.0	1.0	0.0	6.3	6.3	16.3	10.0	22.5	3.8	11.3	22.5	80
100-249	0.7	2.0	1.4	7.3	7.3	12.7	8.0	14.7	11.3	9.3	25.3	150
0-99	3.2	4.0	2.5	11.9	8.7	13.4	7.9	15.9	5.4	9.8	17.3	277
MOST EXPERIENCED WORKERS												
ALL	1.0	1.0	0.5	1.5	2.5	3.5	5.6	10.7	9.7	16.3	47.7	197
500+	3.4	0.0	0.0	0.0	0.0	3.3	0.0	0.0	16.7	13.3	63.3	30
250-499	0.0	0.0	0.0	0.0	0.0	0.0	4.0	12.0	8.0	24.0	52.0	25
100-249	0.0	0.0	0.0	0.0	2.0	2.0	6.0	14.0	6.0	14.0	56.0	50
0-99	1.1	2.2	1.0	3.3	4.4	5.4	7.6	11.9	9.8	16.3	36.9	92
TYPICAL WORKERS												
ALL	0.4	1.9	1.0	6.2	2.9	11.4	12.9	26.7	10.9	9.0	16.7	210
500+	0.0	0.0	0.0	0.0	3.4	3.3	13.3	26.7	23.3	6.7	23.3	30
250-499	0.0	0.0	0.0	0.0	0.0	13.8	13.8	44.8	3.5	6.9	17.2	29
100-249	0.0	0.0	0.0	5.7	1.9	13.2	11.3	17.0	20.7	11.3	18.9	53
0-99	1.0	4.1	2.0	10.2	4.1	12.2	13.3	26.5	4.1	9.2	13.3	98
ENTRY LEVEL WORKERS												
ALL	4.2	4.7	3.7	18.9	19.0	26.8	5.3	10.0	3.2	3.7	0.5	190
500+	0.0	0.0	3.3	10.0	20.0	36.7	6.7	13.3	3.3	6.7	0.0	30
250-499	0.0	3.9	0.0	19.2	19.2	34.6	11.5	7.7	0.0	3.9	0.0	26
100-249	2.1	6.4	4.3	17.0	19.1	23.4	6.4	12.8	6.4	2.1	0.0	47
0-99	7.8	5.8	4.6	23.0	18.4	23.0	2.3	8.1	2.3	3.5	1.2	87

MECHANICS, INSTALLERS, AND REPAIRERS

Nature of the Work:

MECHANICS, INSTALLERS AND REPAIRERS maintain, repair, and adjust motor vehicles, equipment, machines, and tools. The job requires such work as machinery repair, auto repair, and communications equipment repair. Workers may also install as well as repair equipment and machinery. Repair work may be performed on or off premises.

Training Requirements:

High school or technical school graduates who have taken courses in shop math, blueprint reading, and electronics are preferred. These courses give students the basic mechanical knowledge and skills necessary to become a mechanic. Training for most mechanic, installer, and repairer occupations requires both classroom instruction in machine operation and practice in repair work. Mechanics get this training through high school and post-secondary programs and on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.71	$8.75	$3.35	$20.00	$7.00	$10.00
Most Experienced	9.97	9.86	5.00	20.00	8.75	11.25
Typical	8.78	8.75	4.00	16.06	7.50	10.00
Entry Level	7.27	7.00	3.35	13.13	5.91	8.54

STATEWIDE

MECHANICS, INSTALLERS, AND REPAIRERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	4.2	7.0	11.0	13.8	18.3	16.7	12.4	8.3	4.7	1.4	2.2	783
500+	0.0	3.9	3.9	10.4	22.0	19.5	18.2	15.6	3.9	2.6	0.0	77
250-499	1.0	4.8	6.7	11.5	19.2	20.2	13.5	13.5	5.8	1.9	1.9	104
100-249	4.0	6.1	14.2	11.9	18.2	16.5	14.2	4.6	3.4	2.3	4.6	176
0-99	5.9	8.4	12.0	15.7	17.4	15.5	10.3	7.3	5.2	0.7	1.6	426
						MOST EXPERIENCED WORKERS						
ALL	0.0	2.6	6.3	8.1	13.0	21.5	16.7	14.8	9.3	3.3	4.4	270
500+	0.0	0.0	0.0	0.0	11.5	15.4	26.9	34.6	3.9	7.7	0.0	26
250-499	0.0	0.0	0.0	8.6	5.7	20.0	20.0	20.0	14.3	5.7	5.7	35
100-249	0.0	0.0	12.1	5.2	12.1	25.9	20.7	8.6	5.2	3.3	6.9	58
0-99	0.0	4.6	6.6	10.6	15.2	21.2	12.6	12.6	10.6	2.0	4.0	151
						TYPICAL WORKERS						
ALL	1.5	4.6	11.4	13.7	24.1	17.6	13.4	8.4	3.4	0.0	1.9	262
500+	0.0	0.0	0.0	4.0	36.0	24.0	20.0	8.0	8.0	0.0	0.0	25
250-499	0.0	0.0	8.8	5.9	29.4	23.5	14.7	14.7	3.0	0.0	0.0	34
100-249	0.0	6.6	13.1	16.4	19.7	16.4	14.7	4.9	1.6	0.0	6.6	61
0-99	2.8	5.6	13.4	16.2	22.5	15.5	11.3	8.5	3.5	0.0	0.7	142
						ENTRY LEVEL WORKERS						
ALL	11.6	14.3	15.5	19.9	17.9	10.8	6.8	1.2	1.2	0.8	0.0	251
500+	0.0	11.6	11.5	26.9	19.2	19.2	7.7	3.9	0.0	0.0	0.0	26
250-499	2.9	14.3	11.4	20.0	22.9	17.1	5.7	5.7	0.0	0.0	0.0	35
100-249	12.3	12.3	17.6	14.0	22.8	7.0	7.0	0.0	3.5	3.5	0.0	57
0-99	15.8	15.8	16.5	21.0	14.3	9.0	6.8	0.0	0.8	0.0	0.0	133

MILLWRIGHTS

Nature of the Work:

MILLWRIGHTS perform any and all tasks involved in preparing complex industrial machinery and systems for the use in plants. These functions include assembling, moving, repairing, and dismantling the machinery as well as construction concrete foundations or wooden platforms on which heavy machines are mounted. As they personally prepare or supervise the construction of these structures, millwrights must know how to read blueprints and work with various building materials.

Training Requirements:

Both formal and informal forms of education are acceptable training for millwrights. Those who learn the trade informally begin as helpers to skilled workers and require six to eight years to complete the process. Others learn through four-year formal apprenticeship programs which combine on-the-job training with classroom instruction.

Applicants for apprentice or helper jobs must be at least 17 years old. Some employers prefer to hire high school or vocational school graduates. Courses in science, mathematics, mechanical drawing, and machine shop practice are useful. Because millwrights often put together and take apart complicated machinery, mechanical aptitude is important. Strength and agility also are important because the work requires a considerable amount of lifting and climbing.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 9.35	$ 9.28	$4.50	$20.00	$8.00	$10.50
Most Experienced	10.51	10.02	6.15	20.00	9.00	11.61
Typical	9.49	9.50	5.50	17.31	8.00	10.56
Entry Level	8.01	8.00	4.50	13.01	6.36	9.40

STATEWIDE

MILLWRIGHTS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	0.4	6.2	8.1	10.4	17.4	18.9	16.6	8.9	6.9	1.9	4.3	259
500+	0.0	0.0	2.8	5.5	27.8	25.0	11.1	19.4	5.6	2.8	0.0	36
250-499	0.0	4.8	9.5	9.5	11.9	21.4	21.4	14.3	4.8	2.4	0.0	42
100-249	0.0	5.7	4.3	8.6	22.7	24.3	22.9	1.4	2.9	2.9	4.3	70
0-99	0.9	9.1	11.7	13.5	12.6	12.6	12.6	8.1	10.8	0.9	7.2	111
MOST EXPERIENCED WORKERS												
ALL	0.0	0.0	2.4	10.7	11.9	16.7	23.8	10.7	10.7	2.4	10.7	84
500+	0.0	0.0	0.0	0.0	16.7	16.7	16.7	33.3	8.3	8.3	0.0	12
250-499	0.0	0.0	0.0	7.7	7.7	15.4	30.7	15.4	15.4	7.7	0.0	13
100-249	0.0	0.0	0.0	4.4	18.2	22.7	36.4	4.6	4.6	0.0	9.1	22
0-99	0.0	0.0	5.4	19.0	8.1	13.5	16.2	5.4	13.5	0.0	18.9	37
TYPICAL WORKERS												
ALL	0.0	2.1	10.9	6.5	17.4	22.8	17.4	10.9	7.6	2.2	2.2	92
500+	0.0	0.0	0.0	8.3	16.7	33.3	16.7	16.7	8.3	0.0	0.0	12
250-499	0.0	0.0	13.3	0.0	20.0	26.7	20.0	20.0	0.0	0.0	0.0	15
100-249	0.0	0.0	8.0	8.0	16.0	32.0	24.0	0.0	4.0	4.0	4.0	25
0-99	0.0	5.0	15.0	7.5	17.5	12.5	12.5	12.5	12.5	2.5	2.5	40
ENTRY LEVEL WORKERS												
ALL	1.2	16.9	10.8	14.5	22.9	16.9	8.4	4.8	2.4	1.2	0.0	83
500+	0.0	0.0	8.4	8.3	50.0	25.0	0.0	8.3	0.0	0.0	0.0	12
250-499	0.0	14.3	14.3	21.4	7.2	21.4	14.3	7.1	0.0	0.0	0.0	14
100-249	0.0	17.4	4.3	13.0	34.8	17.4	8.7	0.0	0.0	4.4	0.0	23
0-99	2.9	23.5	14.7	14.7	11.8	11.8	8.8	5.9	5.9	0.0	0.0	34

ORDER CLERKS - MATERIALS, MERCHANDISE, AND SERVICE

Nature of the Work:

ORDER CLERKS receive and process incoming orders for material, merchandise, or services obtained by mail, telephone, or personally from the customer or company employee. They edit orders received to ensure the price is correct and nomenclature is consistent with the organization's. Other duties include informing the customer of unit prices, shipping dates, anticipated delays, and giving any additional information needed by the customer either by mail or telephone. Order clerks write or type order forms and compute the total cost for the customer as well as record or file copies of orders received according to expected delivery date. They may also be responsible for handling customer complaints.

Training Requirements:

A high school education is preferred for order clerks. Basic spelling, grammar, and reading skills are important. The ability to do neat, accurate paperwork is essential as well as being highly organized. Because of the constant contact with customers, a pleasant, tactful, and outgoing personality is an asset.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$269.50	$260.00	$144.00	$750.00	$224.00	$300.00
Most Experienced	315.59	300.00	170.00	750.00	270.00	350.00
Typical	267.67	260.00	163.00	519.00	231.00	300.00
Entry Level	226.13	220.00	144.00	450.00	192.31	250.00

STATEWIDE

ORDER CLERKS - MATERIALS, MERCHANDISE, AND SERVICE

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	10.8	15.3	15.1	16.8	11.7	12.2	5.8	4.6	2.3	2.4	3.0	868
500+	7.8	17.8	8.9	23.3	13.3	13.3	6.7	5.6	1.1	0.0	2.2	90
250-499	11.6	12.6	18.9	16.8	10.5	15.8	4.2	5.3	1.1	0.0	3.2	95
100-249	10.0	15.3	16.5	16.1	12.5	10.4	6.8	3.6	4.4	2.0	2.4	249
0-99	11.7	15.4	14.8	15.9	11.1	12.2	5.3	4.8	1.6	3.7	3.5	434
						MOST EXPERIENCED WORKERS						
ALL	1.8	4.6	8.2	12.1	14.9	19.6	12.1	7.8	5.7	5.7	7.5	281
500+	0.0	6.9	0.0	20.7	10.3	13.8	20.7	17.2	3.5	0.0	6.9	29
250-499	6.7	0.0	10.0	6.7	13.3	30.0	10.0	10.0	3.3	0.0	10.0	30
100-249	1.2	3.6	8.4	13.3	18.1	18.1	9.7	6.0	10.8	4.8	6.0	83
0-99	1.4	5.8	9.4	10.8	14.4	19.4	12.2	6.5	3.6	8.6	7.9	139
						TYPICAL WORKERS						
ALL	3.6	14.3	19.6	24.3	13.0	12.6	4.3	5.0	1.0	1.0	1.3	301
500+	0.0	13.3	16.7	20.0	23.3	26.7	0.0	0.0	0.0	0.0	0.0	30
250-499	6.0	6.3	18.8	34.4	6.3	18.8	3.1	6.3	0.0	0.0	0.0	32
100-249	4.6	13.8	23.0	24.1	10.3	8.0	9.2	3.5	2.3	0.0	1.2	87
0-99	3.3	16.4	18.4	23.0	13.8	11.2	2.6	6.6	0.7	2.0	2.0	152
						ENTRY LEVEL WORKERS						
ALL	27.3	26.9	17.1	13.6	7.0	4.4	1.1	1.1	0.4	0.7	0.4	286
500+	22.6	32.3	9.7	29.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	31
250-499	21.2	30.3	27.3	9.1	12.1	0.0	0.0	0.0	0.0	0.0	0.0	33
100-249	25.3	29.1	17.7	10.1	8.8	5.1	1.3	1.3	0.0	1.3	0.0	79
0-99	30.7	23.8	16.1	13.3	4.9	6.3	1.4	1.4	0.7	0.7	0.7	143

PAYROLL AND TIMEKEEPING CLERKS

Nature of the Work:

PAYROLL AND TIMEKEEPING CLERKS are responsible for computing wages posting wage data to payroll records, and keeping a daily record showing the time of arrival and departure from work of employees. They also compute earnings from timesheets and work tickets using a calculator. These clerks operate posting machines in order to compute and subtract deductions. Finally, they enter net wages on earnings record card , check stub, and payroll sheet.

Training Requirements:

High school graduates who have an aptitude for numbers are preferred. The ability to keep neat, accurate records, and operate calculators and posting machines is essential. On-the-job training is offered but those who have taken business arithmetic, bookkeeping, and principles of accounting have an advantage.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$278.81	$273.00	$100.00	$520.00	$231.00	$321.00
Most Experienced	322.53	320.00	152.00	520.00	277.00	362.00
Typical	278.58	275.00	133.00	518.00	240.00	310.00
Entry Level	235.01	230.77	100.00	480.00	200.00	262.00

STATEWIDE

PAYROLL AND TIMEKEEPING CLERKS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	8.2	13.1	11.9	17.2	12.2	13.1	8.2	6.8	4.0	2.2	3.1	780
500+	7.1	11.6	9.8	15.2	13.4	13.4	9.8	8.0	4.5	2.7	4.5	112
250-499	6.7	13.4	12.6	12.6	14.3	13.5	10.9	5.9	7.6	0.0	2.5	119
100-249	6.2	7.7	14.7	17.8	12.4	14.7	9.5	8.5	4.3	1.5	2.7	259
0-99	11.0	18.3	10.3	19.3	10.7	11.4	5.2	5.2	2.1	3.4	3.1	290
						MOST EXPERIENCED WORKERS						
ALL	2.0	2.8	5.1	11.9	13.0	16.2	14.6	12.6	9.1	4.4	8.3	253
500+	2.8	0.0	0.0	8.3	13.9	8.3	27.8	11.1	8.3	5.6	13.9	36
250-499	2.5	2.6	7.7	7.7	10.3	12.8	20.5	12.8	15.4	0.0	7.7	39
100-249	1.2	2.3	4.7	11.6	9.3	17.4	16.3	15.1	10.5	3.5	8.1	86
0-99	2.2	4.4	6.5	15.2	17.4	19.6	5.4	10.9	5.4	6.5	6.5	92
						TYPICAL WORKERS						
ALL	4.0	10.9	13.0	21.4	15.2	16.7	6.9	6.5	2.9	1.8	0.7	276
500+	0.0	7.9	15.8	21.0	13.2	23.7	2.6	7.9	5.3	2.6	0.0	38
250-499	2.5	7.5	15.0	15.0	22.5	15.0	10.0	5.0	7.5	0.0	0.0	40
100-249	4.4	5.4	13.0	18.5	16.3	21.7	7.6	9.8	2.2	1.1	0.0	92
0-99	5.7	17.9	11.3	26.4	12.3	10.4	6.6	3.8	0.9	2.8	1.9	106
						ENTRY LEVEL WORKERS						
ALL	19.1	25.9	17.9	17.9	8.0	6.0	3.2	1.2	0.0	0.4	0.4	251
500+	18.4	26.3	13.1	15.8	13.2	7.9	0.0	5.3	0.0	0.0	0.0	38
250-499	15.0	30.0	15.0	15.0	10.0	12.5	2.5	0.0	0.0	0.0	0.0	40
100-249	13.6	16.0	27.2	23.5	11.1	3.7	4.9	0.0	0.0	0.0	0.0	81
0-99	26.1	32.6	13.0	15.2	2.2	4.3	3.3	1.1	0.0	1.1	1.1	92

PHYSICAL SCIENTISTS

Nature of the Work:

PHYSICAL SCIENTISTS engage themselves in research, development, production, or providing technical services pertaining to the physical universe. Persons included in this category are geologists, chemists, and physicists, for example. Their work has two major focal points. One is on increasing their basic knowledge of the physical universe. The second involves the application of these scientific principles and theories to specific problems and situations.

Training Requirements:

The completion of a 4-year physical sciences college program provides the beginner with the basic required knowledge necessary to become a physical scientist. However, graduate training is required for most research and teaching jobs and for the better jobs with good advancement potential. A doctorate degree is required for full faculty status at colleges and universities and for industrial or government jobs administering research and development programs.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$38,266	$37,000	$16,692	$73,915	$30,000	$47,345
Most Experienced	48,523	47,345	30,000	73,915	38,012	55,000
Typical	37,736	34,560	20,984	59,900	30,000	44,200
Entry Level	29,181	28,800	16,692	47,687	22,000	32,800

STATEWIDE

PHYSICAL SCIENTISTS

ANNUAL WAGES

COMPANY SIZE	UNDER $25,000	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 $39,999	$40,000 $42,499	$42,500 $44,999	$45,000 $47,499	$47,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	13.8	7.2	1.1	16.0	9.6	3.2	7.5	7.5	4.3	6.4	23.4	94
500+	3.9	0.0	0.0	15.4	7.7	0.0	11.5	7.7	7.7	11.5	34.6	26
250-499	11.1	11.1	0.0	11.1	11.1	0.0	22.2	0.0	0.0	0.0	33.4	9
100-249	5.0	10.0	0.0	15.0	5.0	0.0	5.0	5.0	5.0	10.0	40.0	20
0-99	25.6	10.3	2.6	17.8	12.8	7.7	2.6	10.3	2.6	2.6	5.1	39
MOST EXPERIENCED WORKERS												
ALL	0.0	0.0	0.0	6.5	6.7	6.7	6.7	6.7	3.3	16.7	46.7	30
500+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7	9
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	83.3	6
0-99	0.0	0.0	0.0	16.7	16.7	16.7	8.3	16.7	8.3	8.3	8.3	12
TYPICAL WORKERS												
ALL	9.4	6.1	0.0	21.9	12.5	3.1	9.4	6.3	6.3	3.1	21.9	32
500+	0.0	0.0	0.0	12.5	0.0	0.0	37.5	12.5	12.5	0.0	25.0	8
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	0.0	14.3	14.3	0.0	0.0	0.0	14.3	14.3	42.8	7
0-99	21.4	14.3	0.0	28.6	14.3	7.2	0.0	7.1	0.0	0.0	7.1	14
ENTRY LEVEL WORKERS												
ALL	31.2	15.6	3.1	18.8	9.4	0.0	6.3	9.4	3.1	0.0	3.1	32
500+	11.1	0.0	0.0	33.4	22.2	0.0	0.0	11.1	11.1	0.0	11.1	9
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	14.3	28.5	0.0	28.6	0.0	0.0	14.3	14.3	0.0	0.0	0.0	7
0-99	53.8	15.4	7.7	7.7	7.7	0.0	0.0	7.7	0.0	0.0	0.0	13

* NOT PUBLISHABLE

PLANT AND SYSTEM OCCUPATIONS

Nature of the Work:

PLANT AND SYSTEM WORKERS operate, maintain, and repair machinery in industrial plants and systems. They monitor and control equipment that range in complexity from the simple boiler in the basement of an apartment building to the technologically advanced equipment in nuclear power and chemical plants and petroleum refineries. Includes such occupations as electricians, plumbers, and various engineers.

Training Requirements:

Employers prefer high school or trade school graduates who have received instruction in mathematics, mechanical drawing, machine-shop practice, physics, and chemistry. Mechanical aptitude, manual dexterity, and good physical condition are also important qualifications. The apprenticeship usually lasts four years. In addition to on-the-job training, apprentices receive classroom instruction in practical chemistry, elementary physics, blueprint reading, applied electricity, instrumentation, electronics, and other technical subjects.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.39	$8.31	$3.35	$15.75	$6.75	$ 9.50
Most Experienced	9.46	9.14	5.50	15.75	8.00	10.20
Typical	8.48	8.31	4.50	13.80	6.75	9.50
Entry Level	7.35	7.00	3.35	12.31	6.00	8.88

STATEWIDE

PLANT AND SYSTEM OCCUPATIONS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	4.9	6.5	16.4	13.1	16.4	20.5	11.5	3.3	3.3	2.5	1.6	122
500+	0.0	0.0	0.0	22.2	11.1	33.3	5.6	5.6	11.1	11.1	0.0	18
250-499	0.0	0.0	0.0	0.0	16.6	33.3	0.0	0.0	16.7	16.7	16.7	6
100-249	4.5	4.6	0.0	22.7	27.3	31.8	9.1	0.0	0.0	0.0	0.0	22
0-99	6.6	9.2	26.3	9.2	14.5	13.2	14.5	3.9	1.3	0.0	1.3	76
MOST EXPERIENCED WORKERS												
ALL	0.0	2.6	5.1	10.3	20.5	25.6	18.0	5.1	5.1	2.6	5.1	39
500+	0.0	0.0	0.0	16.6	0.0	33.3	16.7	0.0	16.7	16.7	0.0	6
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	0.0	14.3	28.6	42.8	14.3	0.0	0.0	0.0	0.0	7
0-99	0.0	4.2	8.3	8.3	25.0	16.7	20.8	8.3	4.2	0.0	4.2	24
TYPICAL WORKERS												
ALL	2.5	5.0	17.5	15.0	17.5	25.0	7.5	5.0	0.0	5.0	0.0	40
500+	0.0	0.0	0.0	16.6	16.7	33.3	0.0	16.7	0.0	16.7	0.0	6
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	14.3	0.0	14.3	42.8	28.6	0.0	0.0	0.0	0.0	0.0	7
0-99	4.0	4.0	28.0	16.0	12.0	20.0	12.0	4.0	0.0	0.0	0.0	25
ENTRY LEVEL WORKERS												
ALL	11.6	11.6	25.6	14.0	11.6	11.6	9.3	0.0	4.7	0.0	0.0	43
500+	0.0	0.0	0.0	33.3	16.7	33.3	0.0	0.0	16.7	0.0	0.0	6
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	12.5	0.0	0.0	37.5	12.5	25.0	12.5	0.0	0.0	0.0	0.0	8
0-99	14.8	18.5	40.8	3.7	7.4	3.7	11.1	0.0	0.0	0.0	0.0	27

* NOT PUBLISHABLE

PRECISION ASSEMBLERS

Nature of the Work:

PRECISION ASSEMBLERS construct, assemble, modify, rebuild, or test machines and equipment. These workers perform at a higher level of precision and detail than other machine assemblers. Tasks range from the performance of one or more repetitive bench or line assembly operations, to mass-produce products.

Training Requirements:

There is no formal training requirements for these workers. Most precision production jobs can be learned informally - starting as a helper and observing experienced workers. Some companies offer in-house training on specific areas of the work. The preferred training for many of the more highly skilled occupations is completion of a formal apprenticeship program. These programs, which usually last from three to five years, combine classroom instruction with on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.05	$7.54	$3.75	$25.00	$6.50	$ 9.11
Most Experienced	9.65	8.82	5.50	25.00	7.81	10.20
Typical	7.94	7.56	5.00	14.00	6.72	9.00
Entry Level	6.68	6.38	3.75	13.25	5.50	7.33

STATEWIDE

PRECISION ASSEMBLERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	4.6	11.8	17.5	23.5	14.4	9.8	5.9	3.9	4.6	2.0	2.0	153
500+	0.0	0.0	16.6	16.7	33.3	0.0	16.7	0.0	16.7	0.0	0.0	6
250-499	0.0	0.0	8.3	16.7	8.3	16.7	25.0	16.7	8.3	0.0	0.0	12
100-249	6.1	14.3	26.5	22.5	10.2	12.3	2.0	2.0	0.0	4.1	0.0	49
0-99	4.5	12.8	14.0	25.6	16.3	8.1	4.7	3.5	5.8	1.2	3.5	86
						MOST EXPERIENCED WORKERS						
ALL	0.0	2.0	2.0	28.6	20.4	14.3	8.2	6.1	10.2	4.1	4.1	49
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	5.9	6.3	31.3	6.3	31.3	6.3	6.3	0.0	6.3	0.0	16
0-99	0.0	0.0	0.0	33.4	25.9	7.4	3.7	7.4	11.1	3.7	7.4	27
						TYPICAL WORKERS						
ALL	0.0	11.7	19.6	25.5	15.7	11.8	7.8	3.9	2.0	0.0	2.0	51
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	12.5	37.5	18.7	25.0	6.3	0.0	0.0	0.0	0.0	0.0	16
0-99	0.0	13.8	13.8	27.6	13.8	13.8	6.9	3.3	3.5	0.0	3.5	29
						ENTRY LEVEL WORKERS						
ALL	13.2	20.6	30.2	17.0	7.6	3.8	1.9	1.9	1.9	1.9	0.0	53
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	17.6	23.5	35.3	17.7	0.0	0.0	0.0	0.0	0.0	5.9	0.0	17
0-99	13.4	23.3	26.7	16.7	10.0	3.3	3.3	0.0	3.3	0.0	0.0	30

* NOT PUBLISHABLE

PRECISION INSTRUMENT MAKERS

Nature of the Work:

PRECISION INSTRUMENT MAKERS fabricate, modify, or repair mechanical assemblies of electrical or electronic instruments. Chronometric timing devises, seismographic and servomechanisms are just a few examples of such instruments. These workers are also responsible for setting up and operating machine tools to remodel electrical and electronic instruments used in electrical logging, subsurface surveying, prospecting, testing, and surveying operations.

Training Requirements:

High school or technical school graduates with an educational background which includes shop and electronics are preferred. Although these jobs can be learned informally - starting as a helper and observing experienced workers, the preferred training is completion of a formal apprenticeship program. These programs, which usually last from three to five years, combine classroom instruction with on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 9.88	$ 9.10	$4.00	$31.53	$7.32	$11.50
Most Experienced	11.73	10.58	6.25	31.53	9.15	12.50
Typical	9.85	8.90	5.80	26.24	7.40	11.54
Entry Level	8.06	7.21	4.00	20.83	6.00	9.62

STATEWIDE

PRECISION INSTRUMENT MAKERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	3.0	6.1	12.1	9.1	13.1	14.2	12.1	13.1	5.1	2.0	10.1	99
500+	0.0	0.0	9.5	4.7	14.3	14.3	14.3	33.3	4.8	0.0	4.8	21
250-499	0.0	6.6	6.7	13.3	6.7	13.3	26.7	13.3	6.7	6.7	0.0	15
100-249	4.8	9.5	14.3	9.5	19.0	9.5	9.5	4.8	4.8	0.0	14.3	21
0-99	4.8	7.1	14.3	9.5	11.9	16.7	7.1	7.1	4.8	2.4	14.3	42
MOST EXPERIENCED WORKERS												
ALL	0.0	0.0	6.1	0.0	12.1	15.0	21.2	15.2	6.1	6.1	18.2	33
500+	0.0	0.0	0.0	0.0	0.0	14.3	28.6	42.8	0.0	0.0	14.3	7
250-499	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	20.0	20.0	0.0	5
100-249	0.0	0.0	0.0	0.0	28.5	14.3	14.3	14.3	14.3	0.0	14.3	7
0-99	0.0	0.0	14.3	0.0	14.3	21.4	7.2	7.1	0.0	7.1	28.6	14
TYPICAL WORKERS												
ALL	0.0	3.0	12.1	18.2	18.2	6.0	9.1	18.2	9.1	0.0	6.1	33
500+	0.0	0.0	0.0	14.3	28.6	0.0	0.0	42.8	14.3	0.0	0.0	7
250-499	0.0	0.0	20.0	0.0	20.0	20.0	20.0	20.0	0.0	0.0	0.0	5
100-249	0.0	0.0	28.5	28.6	14.3	0.0	14.3	0.0	0.0	0.0	14.3	7
0-99	0.0	7.3	7.1	21.4	14.3	7.1	7.1	14.3	14.3	0.0	7.1	14
ENTRY LEVEL WORKERS												
ALL	9.1	15.0	18.2	9.1	9.1	21.2	6.1	6.1	0.0	0.0	6.1	33
500+	0.0	0.0	28.5	0.0	14.3	28.6	14.3	14.3	0.0	0.0	0.0	7
250-499	0.0	20.0	0.0	40.0	0.0	20.0	0.0	20.0	0.0	0.0	0.0	5
100-249	14.3	28.5	14.3	0.0	14.3	14.3	0.0	0.0	0.0	0.0	14.3	7
0-99	14.3	14.3	21.4	7.3	7.1	21.4	7.1	0.0	0.0	0.0	7.1	14

PRECISION PRINTING WORKERS

Nature of the Work:

PRECISION PRINTING WORKERS are involved in setting up and arranging type by hand for the printing of articles, heading, and other printed material, and setting up and operating a photo composing machine to transfer data from a perforated or magnetic tape into print on film or photographic paper. They select the type font and adjust the line spacing and light intensity according to size and face of the type specified. These workers may also be required to proof read to ensure accuracy. Occupations included in this category are Precision Compositors, Typesetters and Arrangers, and Job Printers.

Training Requirements:

High school or technical school graduates with a course background which includes a few printing classes is preferred. Although these jobs can be learned informally - starting as a helper and observing experienced workers, the completion of a formal apprenticeship program is preferred. These programs, which usually last from three to five years, combine classroom instruction with on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 8.34	$ 8.00	$3.50	$16.00	$6.50	$10.00
Most Experienced	10.36	10.00	5.10	16.00	8.75	12.07
Typical	8.38	8.00	3.88	15.00	6.75	9.75
Entry Level	6.38	6.49	3.50	12.00	5.00	7.61

STATEWIDE

PRECISION PRINTING WORKERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	9.2	8.0	17.8	11.6	17.8	8.6	9.8	3.7	4.9	3.1	5.5	163
500+	4.8	0.0	23.8	9.5	33.3	9.5	9.5	4.8	0.0	4.8	0.0	21
250-499	0.0	0.0	50.0	25.0	12.5	12.5	0.0	0.0	0.0	0.0	0.0	8
100-249	8.8	5.9	26.5	5.9	11.8	8.8	8.8	5.9	5.9	2.9	8.8	34
0-99	11.0	11.0	11.0	13.0	17.0	8.0	11.0	3.0	6.0	3.0	6.0	100
MOST EXPERIENCED WORKERS												
ALL	0.0	2.0	10.0	2.0	20.0	10.0	20.0	4.0	12.0	8.0	12.0	50
500+	0.0	0.0	0.0	0.0	28.5	14.3	28.6	14.3	0.0	14.3	0.0	7
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	25.0	0.0	16.7	8.3	8.3	0.0	16.7	8.3	16.7	12
0-99	0.0	3.4	6.9	3.5	17.2	6.9	24.1	3.5	13.8	6.9	13.8	29
TYPICAL WORKERS												
ALL	5.0	5.0	16.6	20.0	20.0	8.3	10.0	6.7	1.7	1.7	5.0	60
500+	0.0	0.0	14.3	14.3	57.1	14.3	0.0	0.0	0.0	0.0	0.0	7
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	9.1	27.2	18.2	0.0	0.0	18.2	18.2	0.0	0.0	9.1	11
0-99	7.7	5.1	12.8	17.9	20.5	10.3	10.3	5.1	2.6	2.6	5.1	39
ENTRY LEVEL WORKERS												
ALL	22.6	17.0	26.4	11.3	13.2	7.6	0.0	0.0	1.9	0.0	0.0	53
500+	14.3	0.0	57.1	14.3	14.3	0.0	0.0	0.0	0.0	0.0	0.0	7
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	27.2	9.1	27.3	0.0	18.2	18.2	0.0	0.0	0.0	0.0	0.0	11
0-99	25.0	25.0	12.5	15.6	12.5	6.3	0.0	0.0	3.1	0.0	0.0	32

* NOT PUBLISHABLE

PRECISION TEXTILE, APPAREL, AND FURNISHINGS WORKERS

Nature of the Work:

PRECISION TEXTILE, APPAREL, AND FURNISHING WORKERS concerned with laying out, marking, and cutting materials; hand or machine-sewing parts of massed produced products; fitting and stitching made-to-measure garments and accessories; hand knitting; hand weaving and embroidering; and fabricating or repairing garments, canvas goods, house furnishings and related products. Includes such occupations as tailors, upholsterers, dry cleaners and dyers. Workers in this division require a high degree of precision and must meet high quality standards, interpreting detailed instructions and specifications.

Training Requirements:

There is no formal training requirements for these workers. Most precision production jobs can be learned informally - starting as a helper and observing experienced workers. Some companies offer in-house training on specific areas of the work. The preferred training for many of the more highly skilled occupations is completion of a formal apprenticeship program. These programs, which usually last from three to five years, combine classroom instruction with on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$6.89	$5.75	$3.35	$25.93	$4.50	$8.02
Most Experienced	8.67	7.10	4.25	25.93	5.40	8.60
Typical	6.68	5.60	3.75	15.00	4.50	8.02
Entry Level	5.36	4.50	3.35	10.00	3.75	6.25

STATEWIDE

PRECISION TEXTILE, APPAREL, AND FURNISHINGS WORKERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	31.1	20.4	10.7	5.8	13.6	2.9	4.8	1.0	2.9	1.0	5.8	103
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	25.0	8.4	0.0	16.7	25.0	0.0	8.3	0.0	8.3	0.0	8.3	12
100-249	33.4	11.1	22.2	0.0	11.1	11.1	0.0	0.0	0.0	11.1	0.0	9
0-99	32.9	24.0	11.4	5.1	8.9	2.5	5.1	1.3	2.5	0.0	6.3	79
MOST EXPERIENCED WORKERS												
ALL	3.0	24.3	15.2	12.1	21.2	3.0	3.0	0.0	0.0	3.0	15.2	33
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	*	*	*	*	*	*	*	*	*	*	*	*
0-99	4.0	28.0	16.0	16.0	16.0	0.0	4.0	0.0	0.0	0.0	16.0	25
TYPICAL WORKERS												
ALL	32.5	21.6	10.8	2.7	16.2	2.7	0.0	2.7	8.1	0.0	2.7	37
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	*	*	*	*	*	*	*	*	*	*	*	*
0-99	34.5	24.1	13.8	0.0	10.3	3.4	0.0	3.5	6.9	0.0	3.5	29
ENTRY LEVEL WORKERS												
ALL	57.6	15.2	6.1	3.0	3.0	3.0	12.1	0.0	0.0	0.0	0.0	33
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	*	*	*	*	*	*	*	*	*	*	*	*
0-99	60.0	20.0	4.0	0.0	0.0	4.0	12.0	0.0	0.0	0.0	0.0	25

* NOT PUBLISHABLE

PRECISION TOOL GRINDERS, FILERS, AND SHARPENERS

Nature of the Work:

PRECISION TOOL GRINDERS, FILERS, AND SHARPENERS smooth, sharpen, polish, and grind metal objects by the wearing action of abrasive materials or machine files. For example, they file grooved, contoured, and irregular surfaces of metal objects such as metalworking dies and machine parts, to conform to templates, other parts, layout, or blueprint specifications. They must study the blueprint or layout of the workpiece, then they select files according to the material, size, and shape of the work, and the amount of stock to be removed. The final step of smoothing and polishing the workpiece with an emery cloth or power buffer is also an important part of the process. Occupations included in this category are tool, cylinder, or card grinders, saw filers, and file-finishers.

Training Requirements:

High school or technical school graduate who have an educational background which includes machine shop and blueprint reading are preferred. Although the job can be learned informally - starting as a helper and observing experienced workers, the preferred training is the completion of a formal apprenticeship program. This program, which usually lasts from three to five years, combines classroom instruction with on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 8.66	$8.73	$3.35	$15.50	$7.20	$ 9.97
Most Experienced	10.08	9.72	4.50	15.50	8.89	11.25
Typical	8.68	8.55	3.75	13.54	7.54	9.70
Entry Level	7.23	7.14	3.35	13.14	6.00	8.63

STATEWIDE

PRECISION TOOL GRINDERS, FILERS, AND SHARPENERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	6.3	6.3	8.5	14.8	17.5	21.5	9.8	5.4	2.7	4.5	2.7	223
500+	2.5	2.5	2.5	7.5	15.0	35.0	17.5	7.5	2.5	2.5	5.0	40
250-499	4.8	4.8	9.5	14.3	23.8	23.8	19.0	0.0	0.0	0.0	0.0	21
100-249	2.1	6.1	10.4	18.8	22.9	16.7	6.3	8.3	0.0	6.3	2.1	48
0-99	9.6	7.9	9.7	15.8	14.9	18.4	7.0	4.4	4.4	5.3	2.6	114
						MOST EXPERIENCED WORKERS						
ALL	2.7	2.7	0.0	6.7	14.9	27.0	14.9	9.5	5.4	8.1	8.1	74
500+	0.0	0.0	0.0	0.0	7.7	30.7	30.8	15.4	0.0	0.0	15.4	13
250-499	0.0	0.0	0.0	0.0	28.6	42.8	28.6	0.0	0.0	0.0	0.0	7
100-249	0.0	0.0	0.0	12.5	31.0	18.8	6.3	18.8	0.0	6.3	6.3	16
0-99	5.2	5.3	0.0	7.9	7.9	26.3	10.5	5.3	10.5	13.2	7.9	38
						TYPICAL WORKERS						
ALL	4.0	4.0	8.0	14.7	24.0	24.0	9.3	5.3	2.7	4.0	0.0	75
500+	0.0	7.7	0.0	0.0	15.4	38.4	15.4	7.7	7.7	7.7	0.0	13
250-499	0.0	0.0	14.3	14.3	42.8	14.3	14.3	0.0	0.0	0.0	0.0	7
100-249	0.0	5.9	11.8	17.5	35.3	17.7	0.0	5.9	0.0	5.9	0.0	17
0-99	7.9	2.7	7.9	18.4	18.4	23.7	10.5	5.3	2.6	2.6	0.0	38
						ENTRY LEVEL WORKERS						
ALL	12.2	12.2	17.6	23.0	13.5	13.5	5.4	1.2	0.0	1.4	0.0	74
500+	7.3	0.0	7.1	21.4	21.4	35.7	7.1	0.0	0.0	0.0	0.0	14
250-499	14.3	14.3	14.3	28.5	0.0	14.3	14.3	0.0	0.0	0.0	0.0	7
100-249	6.7	13.3	20.0	26.7	0.0	13.3	13.3	0.0	0.0	6.7	0.0	15
0-99	15.8	15.8	21.0	21.1	18.4	5.3	0.0	2.6	0.0	0.0	0.0	38

PRECISION WOODWORKERS

Nature of the Work:

PRECISION WOODWORKERS perform tasks relating to the cutting, shaping, and assembling of used or high grade furniture. The workers also are involved in the finishing and refinishing of fine quality furniture. Cabinetmakers, bench carpenters and furniture finishers are just a few of the many occupations in this category.

Training Requirements:

Although there is no formal training requirements for these workers, high school or vocational background, which includes woodworking and shop is preferred. Most precision production jobs can be learned informally - starting as a helper and observing experienced workers. Some companies offer in-house training on specific areas of the work. The preferred training for many of the more highly skilled occupations is completion of a formal apprenticeship program. These programs, which usually last from three to five years, combine classroom instruction with on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.03	$7.50	$3.35	$19.23	$5.80	$ 9.80
Most Experienced	9.95	8.70	5.80	19.23	8.00	11.25
Typical	8.17	7.50	4.00	16.55	6.00	9.50
Entry Level	5.98	5.25	3.35	12.50	4.25	6.50

STATEWIDE

PRECISION WOODWORKERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	14.2	12.7	14.2	14.2	16.4	4.5	6.0	5.2	5.2	0.7	6.7	134
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	11.1	11.1	16.7	33.3	22.2	0.0	0.0	0.0	5.6	0.0	0.0	18
0-99	15.2	12.7	14.6	11.8	15.5	5.5	6.4	4.6	4.6	0.9	8.2	110
MOST EXPERIENCED WORKERS												
ALL	0.0	2.3	11.6	9.3	32.6	7.0	4.6	11.6	4.7	0.0	16.3	43
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	0.0	33.3	50.0	0.0	0.0	0.0	16.7	0.0	0.0	6
0-99	0.0	2.9	14.3	5.7	31.4	8.6	5.7	11.4	0.0	0.0	20.0	35
TYPICAL WORKERS												
ALL	2.1	12.5	18.6	22.9	14.6	6.3	8.3	4.2	4.2	2.1	4.2	48
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	0.0	0.0	16.6	66.7	16.7	0.0	0.0	0.0	0.0	0.0	0.0	6
0-99	2.5	15.0	20.0	17.5	12.5	7.5	10.0	2.5	5.0	2.5	5.0	40
ENTRY LEVEL WORKERS												
ALL	41.9	23.3	11.6	9.3	2.3	0.0	4.6	0.0	7.0	0.0	0.0	43
500+	*	*	*	*	*	*	*	*	*	*	*	*
250-499	*	*	*	*	*	*	*	*	*	*	*	*
100-249	33.4	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
0-99	45.7	20.0	8.6	11.4	2.8	0.0	2.9	0.0	8.6	0.0	0.0	35

* NOT PUBLISHABLE

PRESS AND PRESS BRAKE MACHINE SETTERS AND SET-UP OPERATORS

Nature of the Work:

PRESS AND PRESS BRAKE MACHINE SETTERS AND SET-UP OPERATORS set up and/or operate power press machines or power brake machines to bend, form, stretch, notch, punch, or straighten metal or plastic plates and structural shapes as specified by blueprints, work orders, or drawings. They select, position, and align dies in the machine ram and bed by using shims rule, square, or templates. Finally, they verify the dimensions of the workpiece by using a template or scale.

Training Requirements:

Employers do not require a high school diploma. However, they often prefer high school or vocational school graduates who have taken courses in mathematics, machine shop, and blueprint reading. Most workers learn these jobs through on-the-job training provided by their employer. Persons interested in these jobs should have manual dexterity and be mechanically inclined to use the tools and machinery required in their work. Physical stamina and strength are also essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.71	$7.50	$3.35	$16.38	$6.15	$9.05
Most Experienced	8.61	8.72	4.35	16.38	7.21	9.72
Typical	8.00	7.83	4.00	14.56	6.75	9.00
Entry Level	6.48	6.27	3.50	11.00	5.00	7.58

STATEWIDE

PRESS AND PRESS BRAKE MACHINE SETTERS AND SET-UP OPERATORS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	9.6	11.1	16.1	18.6	16.8	14.6	7.5	1.1	1.8	1.4	1.4	280
500+	3.7	0.0	7.4	7.4	14.8	44.5	7.4	3.7	0.0	3.7	7.4	27
250-499	2.9	5.7	11.4	25.7	31.4	14.3	5.7	0.0	0.0	2.9	0.0	35
100-249	11.1	7.4	25.9	20.4	20.4	9.3	1.7	0.0	1.9	1.9	0.0	54
0-99	11.6	15.3	15.2	18.3	12.8	11.6	9.8	1.2	2.4	0.6	1.2	164
						MOST EXPERIENCED WORKERS						
ALL	5.3	5.3	10.5	16.8	20.0	20.0	11.6	1.0	3.2	4.2	2.1	95
500+	0.0	0.0	0.0	0.0	11.1	33.4	22.2	11.1	0.0	11.1	11.1	9
250-499	0.0	0.0	0.0	9.1	45.4	27.3	9.1	0.0	0.0	9.1	0.0	11
100-249	5.9	0.0	17.5	17.7	23.5	17.7	5.9	0.0	5.9	5.9	0.0	17
0-99	6.9	8.6	12.1	20.7	15.5	17.2	12.1	0.0	3.5	1.7	1.7	58
						TYPICAL WORKERS						
ALL	3.2	10.5	14.7	22.1	21.1	16.8	6.3	1.1	2.1	0.0	2.1	95
500+	0.0	0.0	0.0	0.0	22.2	66.7	0.0	0.0	0.0	0.0	11.1	9
250-499	0.0	0.0	16.7	33.3	25.0	16.7	8.3	0.0	0.0	0.0	0.0	12
100-249	5.5	5.6	22.2	27.8	27.8	11.1	0.0	0.0	0.0	0.0	0.0	18
0-99	3.6	16.1	14.3	21.4	17.8	10.7	8.9	1.8	3.6	0.0	1.8	56
						ENTRY LEVEL WORKERS						
ALL	21.1	17.8	23.3	16.7	8.9	6.7	4.4	1.1	0.0	0.0	0.0	90
500+	11.1	0.0	22.2	22.2	11.1	33.4	0.0	0.0	0.0	0.0	0.0	9
250-499	8.3	16.7	16.7	33.3	25.0	0.0	0.0	0.0	0.0	0.0	0.0	12
100-249	21.1	15.8	36.8	15.8	10.5	0.0	0.0	0.0	0.0	0.0	0.0	19
0-99	26.0	22.0	20.0	12.0	4.0	6.0	8.0	2.0	0.0	0.0	0.0	50

PROCUREMENT CLERKS

Nature of the Work:

PROCUREMENT CLERKS compile information and records to prepare purchase orders for the procurement of material for an industrial firm. They verify nomenclature and specificatons of the purchase request and search inventory records or the warehouse to determine if the material on hand is in sufficient quantity. They consult catalogs and interview suppliers to obtain prices and specifications, then type or write purchase orders and send a copy to the supplier and department originating the request. Another part of their duties includes compiling records of items purchased or transferred between departments, prices, deliveries, and inventories. These clerks may also be required to perform any other task as necessary to ensure the procurement of material.

Training Requirements:

A high school education is preferred for procurement clerks. Basic spelling, grammar, and reading skills are important. The ability to do neat, accurate paperwork is essential as well as being highly organized. Because of the constant contact with customers, a pleasant, tactful, and outgoing personality is an asset.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$270.03	$260.00	$140.00	$736.00	$230.00	$304.62
Most Experienced	312.90	308.00	190.00	736.00	270.00	346.00
Typical	269.20	261.00	175.00	450.00	240.00	300.00
Entry Level	228.81	223.00	140.00	385.00	200.00	252.00

STATEWIDE

PROCUREMENT CLERKS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	9.6	14.2	14.2	18.8	12.9	13.2	5.9	4.6	2.5	2.2	1.9	325
500+	12.5	9.7	12.5	19.4	12.5	11.1	9.7	4.2	5.6	1.4	1.4	72
250-499	7.7	15.4	17.3	19.2	15.4	15.4	5.8	1.9	1.9	0.0	0.0	52
100-249	7.0	14.0	17.0	16.0	18.0	9.0	6.0	4.0	2.0	5.0	2.0	100
0-99	11.9	16.8	10.9	20.8	6.9	17.8	3.0	6.9	1.0	1.0	3.0	101
						MOST EXPERIENCED WORKERS						
ALL	2.9	3.8	7.6	11.4	17.1	19.0	14.3	8.6	4.8	5.7	4.8	105
500+	4.2	0.0	4.4	4.4	17.4	17.4	21.7	8.7	13.0	4.4	4.4	23
250-499	0.0	12.5	0.0	6.1	25.0	31.3	12.5	6.3	6.3	0.0	0.0	16
100-249	2.8	2.9	8.6	14.3	20.0	11.4	14.3	8.6	0.0	11.4	5.7	35
0-99	3.2	3.2	12.9	16.1	9.7	22.6	9.7	9.7	3.2	3.2	6.5	31
						TYPICAL WORKERS						
ALL	4.4	9.7	20.4	23.9	15.1	15.0	3.5	4.4	1.8	0.9	0.9	113
500+	8.3	4.2	20.8	20.8	16.7	16.7	8.3	0.0	4.2	0.0	0.0	24
250-499	5.4	5.6	22.2	27.8	16.7	16.7	5.6	0.0	0.0	0.0	0.0	18
100-249	0.0	8.8	26.5	17.7	23.5	11.8	3.0	2.9	2.9	2.9	0.0	34
0-99	5.4	16.2	13.5	29.8	5.4	16.2	0.0	10.8	0.0	0.0	2.7	37
						ENTRY LEVEL WORKERS						
ALL	22.4	29.0	14.0	20.6	6.6	5.6	0.0	0.9	0.9	0.0	0.0	107
500+	24.0	24.0	12.0	32.0	4.0	0.0	0.0	4.0	0.0	0.0	0.0	25
250-499	16.7	27.8	27.8	22.2	5.5	0.0	0.0	0.0	0.0	0.0	0.0	18
100-249	19.4	32.3	16.1	16.1	9.7	3.2	0.0	0.0	3.2	0.0	0.0	31
0-99	27.3	30.3	6.1	15.0	6.1	15.2	0.0	0.0	0.0	0.0	0.0	33

PRODUCTION, PLANNING, AND EXPEDITING CLERKS

Nature of the Work:

PRODUCTION, PLANNING, AND EXPEDITING CLERKS coordinate and expedite the flow of work and materials within or between the departments of an establishment according to the production schedule. The duties include reviewing and distributing production schedules and work orders, conferring with department supervisors to determine the progress of the work and any production problems. Their duties may also include scheduling workers and estimating costs, routing and delivering parts to ensure production quotas are met, and scheduling the shipment of parts. Finally, they may be responsible for keeping track of the inventory of material in the department and ensuring that the merchandise is shipped to the vendor by the promised date.

Training Requirements:

High school graduates are preferred for production, planning, and expediting clerks. Basic spelling, grammar, mathematical, and reading comprehension skills are important. The ability to do neat, accurate paperwork is essential as well as being highly organized. On-the-job training is generally offered to beginner clerks.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$338.86	$320.00	$140.00	$1100.00	$260.00	$397.00
Most Experienced	401.49	376.00	190.00	1100.00	320.00	468.00
Typical	336.77	320.00	173.00	760.00	275.00	385.00
Entry Level	276.18	265.00	140.00	688.00	225.00	307.69

STATEWIDE

PRODUCTION, PLANNING, AND EXPEDITING CLERKS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	4.5	7.0	9.0	9.7	10.4	11.4	8.9	7.7	6.6	6.9	17.9	754
500+	4.5	7.9	9.0	10.1	12.4	10.1	6.7	10.1	10.1	9.0	10.1	89
250-499	6.6	9.4	9.4	8.5	12.3	17.0	7.6	11.3	3.8	4.7	9.4	106
100-249	4.3	6.0	7.3	13.8	9.9	10.8	13.4	6.0	6.0	5.2	17.3	232
0-99	4.0	6.7	10.1	7.0	9.5	10.4	6.7	7.0	7.0	8.3	23.3	327
MOST EXPERIENCED WORKERS												
ALL	0.8	1.2	3.6	5.2	7.6	8.4	12.9	8.4	8.0	8.4	35.5	249
500+	0.0	0.0	3.5	6.9	6.9	6.9	6.9	6.9	17.2	17.2	27.6	29
250-499	3.0	2.9	5.9	0.0	2.9	20.6	14.7	14.7	8.8	5.9	20.6	34
100-249	1.4	0.0	2.7	8.0	9.3	2.7	21.3	5.3	8.0	5.3	36.0	75
0-99	0.0	1.8	3.6	4.5	8.1	9.0	8.1	9.0	5.4	9.0	41.5	111
TYPICAL WORKERS												
ALL	1.1	7.2	8.3	9.1	10.6	16.2	7.2	9.8	7.9	7.5	15.1	265
500+	0.0	6.9	10.4	6.9	10.3	17.2	6.9	20.7	6.9	10.3	3.5	29
250-499	2.7	10.8	5.4	10.8	19.0	18.9	5.4	10.8	2.7	5.4	8.1	37
100-249	1.2	5.9	8.3	12.9	5.9	20.0	9.4	9.4	8.2	5.9	12.9	85
0-99	0.9	7.0	8.8	6.1	11.4	12.3	6.1	7.0	9.7	8.8	21.9	114
ENTRY LEVEL WORKERS												
ALL	12.1	12.9	15.4	15.0	12.9	9.2	6.7	4.6	3.7	4.6	2.9	240
500+	12.9	16.1	12.9	16.1	19.3	6.5	6.5	3.2	6.5	0.0	0.0	31
250-499	14.3	14.3	17.1	14.3	14.3	11.4	2.8	8.6	0.0	2.9	0.0	35
100-249	11.1	12.5	11.1	20.8	15.3	8.3	9.7	2.8	1.4	4.2	2.8	72
0-99	11.7	11.8	18.6	10.8	8.8	9.8	5.9	4.9	5.9	6.9	4.9	102

PROGRAMMERS - NUMERICAL, TOOL, AND PROCESS CONTROL

Nature of the Work:

PROCESS CONTROL PROGRAMMERS plan and write computer programs for control systems that automate operations. They prepare flow charts, documents and sequence logic; develop programs according to specifications and standards of both process and computer systems, and write the complete sequence of machine instructions and routines necessary to complete the processing cycle.

TOOL PROGRAMMERS, NUMERICAL CONTROL plan numerical control tape programs to control contour-path machining of metal parts on automatic machine tools by means of magnetic or perforated tape. They also analyze parts drawings, sketches and design data to determine dimensions and configuration of cuts, selecting cutting tools, and machine speeds and feeds, according to knowledge of machine shop processes.

Training Requirements

Tool programmers learn their jobs through a combination of work experience and vocational study. Employers prefer skilled machinists for programmer jobs. Because programming methods differ among the brands of numerically controlled machine tool manufacturers, firms that purchase their machines, often provide programmer training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$25,091	$24,752	$ 9,360	$50,000	$19,968	$30,000
Most Experienced	30,455	30,200	13,520	50,000	24,960	35,000
Typical	24,830	24,900	12,480	38,000	20,800	30,000
Entry Level	19,819	19,760	9,360	30,200	16,600	23,244

STATEWIDE

PROGRAMMERS - NUMERICAL, TOOL, AND PROCESS CONTROL

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	8.8	7.7	9.3	15.4	10.4	14.8	5.5	12.1	3.3	5.0	7.7	182
500+	7.3	9.8	7.3	14.6	14.6	7.3	12.2	4.9	7.3	4.9	9.8	41
250-499	13.6	4.5	27.3	13.6	9.1	18.2	0.0	9.1	4.6	0.0	0.0	22
100-249	0.0	10.0	12.5	15.0	12.5	17.5	7.5	12.5	2.5	0.0	10.0	40
0-99	12.5	6.3	3.8	16.5	7.6	16.5	2.5	16.5	1.3	8.9	7.6	79
MOST EXPERIENCED WORKERS												
ALL	3.3	1.6	4.9	4.9	11.5	14.8	4.9	18.0	8.2	8.2	19.7	61
500+	0.0	7.7	0.0	0.0	23.1	0.0	15.4	7.7	15.4	0.0	30.7	13
250-499	0.0	0.0	37.5	12.5	0.0	12.5	0.0	25.0	12.5	0.0	0.0	8
100-249	0.0	0.0	0.0	0.0	21.4	28.6	7.2	21.4	7.1	0.0	14.3	14
0-99	7.7	0.0	0.0	7.7	3.8	15.4	0.0	19.2	3.9	19.2	23.1	26
TYPICAL WORKERS												
ALL	6.4	6.5	4.8	22.6	9.7	19.4	4.8	14.5	1.6	6.5	3.2	62
500+	7.3	7.1	0.0	21.4	21.4	14.3	0.0	7.1	7.1	14.3	0.0	14
250-499	14.3	14.3	14.3	14.3	0.0	42.8	0.0	0.0	0.0	0.0	0.0	7
100-249	0.0	0.0	7.7	38.4	7.7	7.7	15.4	7.7	0.0	0.0	15.4	13
0-99	7.2	7.1	3.6	17.9	7.1	21.4	3.6	25.0	0.0	7.1	0.0	28
ENTRY LEVEL WORKERS												
ALL	16.9	15.3	18.6	18.6	10.2	10.2	6.8	3.4	0.0	0.0	0.0	59
500+	14.3	14.3	21.4	21.4	0.0	7.2	21.4	0.0	0.0	0.0	0.0	14
250-499	28.5	0.0	28.6	14.3	28.6	0.0	0.0	0.0	0.0	0.0	0.0	7
100-249	0.0	30.7	30.8	7.7	7.7	15.4	0.0	7.7	0.0	0.0	0.0	13
0-99	24.0	12.0	8.0	24.0	12.0	12.0	4.0	4.0	0.0	0.0	0.0	25

PUNCHING MACHINE SETTERS AND SET-UP OPERATORS

Nature of the Work:

PUNCHING MACHINE SETTERS AND SET-UP OPERATORS set up and/or operate machines to trim, punch, shape, crimp, cut blanks, or notch metal or plastic workpieces between preset dies according to specifications. They adjust the length of the ram stroke specified for the particular die and gage of the workpieces and position the workpiece against fixtures, or stops on the machine bed.

Training Requirements:

Employers do not require a high school diploma. However, they often prefer high school or vocational school graduates who have taken courses in mathematics, machine shop, and blueprint reading. Most workers learn these jobs through on-the-job training provided by their employer. Persons interested in these jobs should have manual dexterity and be mechanically inclined to use the tools and machinery required in their work. Physical stamina and strength are also essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.15	$7.00	$2.88	$16.38	$5.50	$8.50
Most Experienced	8.27	8.30	4.00	16.38	7.00	9.50
Typical	7.31	7.00	3.85	14.56	6.00	8.17
Entry Level	5.92	5.30	2.88	10.79	4.50	7.00

STATEWIDE

PUNCHING MACHINE SETTERS AND SET-UP OPERATORS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13,99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	15.5	13.6	18.3	17.9	14.0	10.1	7.4	1.2	0.4	0.4	1.2	257
500+	3.6	3.9	11.5	15.4	11.5	38.5	3.9	3.9	0.0	3.9	3.9	26
250-499	4.4	13.6	18.2	27.3	18.2	9.1	4.6	4.6	0.0	0.0	0.0	22
100-249	16.3	14.3	24.5	18.4	18.4	0.0	8.1	0.0	0.0	0.0	0.0	49
0-99	18.7	15.0	17.5	16.9	12.5	8.8	8.1	0.6	0.6	0.0	1.3	160
MOST EXPERIENCED WORKERS												
ALL	3.7	4.9	14.6	19.5	23.2	13.4	14.6	3.7	0.0	0.0	2.4	82
500+	0.0	0.0	0.0	12.5	12.5	50.0	0.0	12.5	0.0	0.0	12.5	8
250-499	0.0	0.0	12.5	37.5	25.0	12.5	0.0	12.5	0.0	0.0	0.0	8
100-249	0.0	5.9	35.3	11.8	29.4	0.0	17.6	0.0	0.0	0.0	0.0	17
0-99	6.1	6.1	10.2	20.4	22.5	12.3	18.4	2.0	0.0	0.0	2.0	49
TYPICAL WORKERS												
ALL	9.1	12.5	23.9	25.0	10.2	10.2	5.7	0.0	1.2	1.1	1.1	88
500+	0.0	11.1	0.0	22.2	11.1	33.4	11.1	0.0	0.0	11.1	0.0	9
250-499	0.0	14.3	28.5	14.3	28.6	0.0	14.3	0.0	0.0	0.0	0.0	7
100-249	6.2	25.0	25.0	25.0	12.5	0.0	6.3	0.0	0.0	0.0	0.0	16
0-99	12.5	8.9	26.8	26.8	7.1	10.7	3.6	0.0	1.8	0.0	1.8	56
ENTRY LEVEL WORKERS												
ALL	33.3	23.0	16.1	9.2	9.2	6.9	2.3	0.0	0.0	0.0	0.0	87
500+	11.1	0.0	33.4	11.1	11.1	33.3	0.0	0.0	0.0	0.0	0.0	9
250-499	14.3	28.5	14.3	28.6	0.0	14.3	0.0	0.0	0.0	0.0	0.0	7
100-249	43.7	12.5	12.5	18.8	12.5	0.0	0.0	0.0	0.0	0.0	0.0	16
0-99	36.4	29.1	14.6	3.6	9.1	3.6	3.6	0.0	0.0	0.0	0.0	55

RECEPTIONISTS

Nature of the Work:

RECEPTIONISTS greet people who visit their firm or organization. Depending upon where they work, the day-to-day duties of receptionists vary considerably. They may provide callers with identification cards as well as arrange for escorts. Typically, receptionists keep records of callers and appointments, type, file, operate switchboards, sort mail, distribute messages, and perform other routine clerical tasks.

Training Requirements:

Although a college degree or business school training can be helpful when seeking promotions to better paying office jobs, employers do not usually require more than a high school education. Courses in English, spelling, typing, elementary bookkeeping and business practices can be useful. It is perhaps most important, however, that applicants enjoy dealing with the public and are able to handle a variety of situations without close supervision.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$243.02	$240.00	$135.00	$450.00	$205.00	$273.00
Most Experienced	279.01	275.00	150.00	450.00	250.00	308.00
Typical	244.32	240.00	150.00	430.00	220.00	265.00
Entry Level	207.20	200.00	135.00	377.51	190.00	225.00

STATEWIDE

RECEPTIONISTS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	14.3	24.1	17.4	19.5	9.5	8.2	3.1	1.9	1.1	0.7	0.2	1122
500+	5.7	17.0	12.3	19.8	17.9	9.4	9.4	2.8	5.7	0.0	0.0	106
250-499	16.8	24.3	14.9	17.8	13.1	9.4	3.7	0.0	0.0	0.0	0.0	107
100-249	13.0	23.0	18.9	20.3	10.3	8.0	4.1	1.8	0.6	0.0	0.0	339
0-99	16.2	26.1	17.9	19.3	6.8	7.9	1.2	2.1	0.7	1.4	0.4	570
MOST EXPERIENCED WORKERS												
ALL	3.3	9.3	11.5	21.6	17.4	19.4	7.9	4.8	2.5	2.0	0.3	356
500+	0.0	2.8	0.0	8.6	20.0	22.9	25.7	8.6	11.4	0.0	0.0	35
250-499	5.9	11.8	2.9	14.7	32.3	20.6	11.8	0.0	0.0	0.0	0.0	34
100-249	0.0	11.1	13.9	21.3	20.4	16.7	9.3	5.6	1.7	0.0	0.0	108
0-99	5.6	8.9	14.0	25.7	12.3	20.1	2.8	4.5	1.7	3.9	0.5	179
TYPICAL WORKERS												
ALL	7.4	22.8	23.2	27.4	9.9	5.6	1.8	0.8	0.5	0.3	0.3	394
500+	2.8	8.6	11.4	34.3	31.4	5.7	2.9	0.0	2.9	0.0	0.0	35
250-499	5.5	27.8	22.2	30.6	5.6	8.3	0.0	0.0	0.0	0.0	0.0	36
100-249	8.4	20.0	25.0	25.8	10.8	6.7	3.3	0.0	0.0	0.0	0.0	120
0-99	7.9	26.1	24.6	26.6	6.4	4.4	1.0	1.5	0.5	0.5	0.5	203
ENTRY LEVEL WORKERS												
ALL	32.0	39.8	16.6	9.1	1.6	0.3	0.0	0.3	0.3	0.0	0.0	372
500+	13.9	38.9	25.0	16.6	2.8	0.0	0.0	0.0	2.8	0.0	0.0	36
250-499	37.9	32.4	18.9	8.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0	37
100-249	30.6	37.9	17.1	13.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	111
0-99	35.1	42.6	14.4	5.3	2.1	0.0	0.0	0.5	0.0	0.0	0.0	188

SALES REPRESENTATIVES, EXCEPT RETAIL & SERVICE

Nature of the Work:

SALES REPRESENTATIVES, EXCEPT SCIENTIFIC AND RELATED PRODUCTS OR SERVICES AND RETAIL sell goods and services for wholesalers or manufacturers to business or groups of individuals. Work requires a substantial knowledge of the items sold. Sales representatives solicit orders from established clients or secure new customers.

SALES REPRESENTATIVES, SCIENTIFIC AND RELATED PRODUCTS EXCEPT SERVICES AND RETAIL sell products requiring scientific or similar knowledge. This knowledge is in areas such as biology, engineering, chemistry, and electronics, and is normally obtained from two or three years of post secondary education or its equivalent. They may sell products such as aircrafts, agricultural equipment and supplies, industrial machinery, medical supplies, electronic equipment, chemicals, and precision instruments.

Training Requirements:

The training required for sales representatives is as varied as the work itself. For those selling complex products, such as electronics equipment or liability insurance, substantial education is needed. Many employers prefer college graduates with major in a particular field, such as science, engineering, physics, biology and chemistry. In addition,many companies, expecially those that manufacturer technical products, have formal training for beginning sales workers, that lasts two years or longer.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$547.76	$500.00	$115.38	$2500.00	$385.00	$670.00
Most Experienced	693.90	634.63	175.00	2500.00	500.00	850.00
Typical	538.76	500.00	145.00	1663.00	400.00	650.00
Entry Level	404.77	385.00	115.38	1480.00	300.00	480.00

STATEWIDE

SALES REPRESENTATIVES, EXCEPT RETAIL AND SERVICE

WEEKLY WAGES

COMPANY SIZE	UNDER $100.00	$100.00 $199.99	$200.00 $299.99	$300.00 $399.99	$400.00 $499.99	$500.00 $599.99	$600.00 $699.99	$700.00 $799.99	$800.00 $899.99	$900.00 $999.99	$1000.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	0.0	1.8	8.2	17.6	20.9	17.5	12.5	8.4	4.7	3.2	5.2	958
500+	0.0	0.0	4.2	2.1	20.8	22.9	14.6	16.7	6.2	10.4	2.1	48
250-499	0.0	0.0	1.6	16.4	19.7	21.3	14.7	3.3	6.6	4.9	11.5	61
100-249	0.0	0.5	7.4	14.0	20.5	18.8	12.2	10.0	6.1	3.1	7.4	229
0-99	0.0	2.6	9.3	20.3	21.1	16.3	12.3	7.6	3.9	2.6	4.0	620
MOST EXPERIENCED WORKERS												
ALL	0.0	1.1	1.6	7.2	15.4	16.0	16.3	11.6	10.7	7.2	12.9	319
500+	0.0	0.0	0.0	0.0	6.1	12.5	12.5	18.8	18.8	25.0	6.3	16
250-499	0.0	0.0	0.0	9.6	9.5	23.8	14.3	0.0	9.5	9.5	23.8	21
100-249	0.0	0.0	1.3	5.0	13.9	17.7	12.7	15.2	11.4	6.3	16.5	79
0-99	0.0	2.0	2.0	8.4	17.2	14.8	18.2	10.8	9.9	5.9	10.8	203
TYPICAL WORKERS												
ALL	0.0	1.2	4.2	17.1	21.3	22.9	15.3	11.4	2.4	2.4	1.8	334
500+	0.0	0.0	0.0	0.0	12.5	37.5	18.7	25.0	0.0	6.3	0.0	16
250-499	0.0	0.0	0.0	14.3	14.3	28.6	14.3	9.5	4.7	4.8	9.5	21
100-249	0.0	0.0	5.1	12.7	21.5	19.0	20.2	11.4	5.1	2.5	2.5	79
0-99	0.0	1.8	4.6	20.2	22.5	22.9	13.3	10.6	1.4	1.8	0.9	218
ENTRY LEVEL WORKERS												
ALL	0.0	3.0	19.3	29.2	26.2	13.1	5.6	1.6	1.0	0.0	1.0	305
500+	0.0	0.0	12.5	6.1	43.8	18.8	12.5	6.3	0.0	0.0	0.0	16
250-499	0.0	0.0	5.3	26.3	36.8	10.5	15.8	0.0	5.3	0.0	0.0	19
100-249	0.0	1.4	16.9	25.4	26.8	19.7	2.8	2.8	1.4	0.0	2.8	71
0-99	0.0	4.0	22.1	32.7	23.6	10.6	5.0	1.0	0.5	0.0	0.5	199

SECRETARIES

Nature of the Work:

SECRETARIES perform a variety of administrative and clerical duties, such as scheduling appointments, giving information to callers, organizing and maintaining files, filling out forms, typing and taking and transcribing dictation. They may also answer letters, do research, and prepare statistical reports. Therefore,the efficiency of an organization depends in large part upon secretaries, who are at the center of communications within the firm.

Some secretaries do highly specialized work. Legal secretaries prepare legal papers and correspondences such as summonses, complaints, motions, and subpeonas. Medical secretaries assist physicians or medical scientists with reports, speeches, articles, and conference preceedings. Technical secretaries work for engineers and scientists.

Training Requirement:

High school graduates qualify for many secretarial positions provided they have basic office skills. Secretaries must be proficient in typing and good in spelling, punctuation, grammar and oral communication. Shorthand is necessary for some jobs. Word processing experience is becoming increasingly important, although many employers will provide training in these skills.

Secretarial training programs are available at vocational-technical schools, business schools, and junior and community colleges. Legal and medical secretaries usually must be graduates of a post-secondary training program. Some secretaries advance from positions as typists, receptionists, or office clerks.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$290.98	$280.00	$134.62	$942.31	$240.00	$337.00
Most Experienced	343.71	345.00	180.00	942.31	290.00	392.00
Typical	290.49	288.00	150.00	585.00	250.00	326.00
Entry Level	237.43	240.00	134.62	487.00	200.00	267.00

STATEWIDE

SECRETARIES

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	6.5	11.0	11.8	16.2	11.3	12.0	9.2	7.6	5.0	4.5	4.9	1360
500+	2.4	5.6	11.1	12.7	11.1	15.1	11.9	9.5	10.3	4.0	6.3	126
250-499	3.4	7.1	9.9	19.9	11.4	13.5	11.4	10.6	2.8	3.6	6.4	141
100-249	3.8	10.0	10.0	16.0	11.9	12.8	11.0	8.5	5.6	6.0	4.4	319
0-99	8.9	13.0	12.9	16.2	11.1	10.9	7.6	6.5	4.3	4.1	4.5	774
MOST EXPERIENCED WORKERS												
ALL	0.7	3.3	5.1	9.6	8.5	12.9	12.5	13.8	10.2	10.9	12.5	449
500+	0.0	0.0	2.4	0.0	4.9	9.8	14.6	14.6	24.4	9.8	19.5	41
250-499	0.0	4.2	0.0	8.5	4.3	12.8	17.0	21.3	6.4	8.5	17.0	47
100-249	0.0	2.8	2.8	6.5	10.3	14.0	11.2	15.9	12.2	14.0	10.3	107
0-99	1.2	3.9	7.5	12.6	9.1	13.0	11.8	11.4	7.9	10.2	11.4	254
TYPICAL WORKERS												
ALL	3.4	8.3	10.6	18.0	15.4	15.4	12.5	8.0	4.2	2.3	1.9	473
500+	0.0	2.4	7.1	9.5	14.3	31.0	16.7	9.5	7.1	2.4	0.0	42
250-499	2.1	2.1	10.4	16.6	14.6	22.9	14.6	10.4	2.1	2.1	2.1	48
100-249	2.7	5.4	8.2	20.0	14.6	13.6	18.2	8.2	4.6	2.7	1.8	110
0-99	4.4	11.4	12.1	18.7	16.1	12.4	9.2	7.3	4.0	2.2	2.2	273
ENTRY LEVEL WORKERS												
ALL	16.0	21.9	19.9	21.0	9.8	7.3	2.3	0.9	0.5	0.2	0.2	438
500+	7.0	13.7	23.3	27.9	14.0	4.7	4.7	4.7	0.0	0.0	0.0	43
250-499	8.7	15.2	19.6	34.8	15.2	4.3	2.2	0.0	0.0	0.0	0.0	46
100-249	8.8	22.5	19.6	21.6	10.8	10.8	2.9	1.0	0.0	1.0	1.0	102
0-99	21.9	24.3	19.4	17.0	7.7	6.9	1.6	0.4	0.8	0.0	0.0	247

SHEET METAL WORKERS

Nature of the Work:

SHEET METAL WORKERS fabricate, assemble, install, and repair sheet metal products and equipment, such as control boxes, drainpipes, and furnace casings. Their work may involve any of the following: setting up and operating fabricating machines to cut, bend, and straighten sheet metal, shaping metal over anvils, blocks, or forms using a hammer; operating soldering and welding equipment to join sheet metal parts; or inspecting, assembling and smoothing seams and joints or burred surfaces.

Training Requirements:

A high school education with courses in trigonometry, geometry, mechanical drawing, and shop is required. The preferred way to learn this trade is through a formal apprenticeship. This program usually consists of four years of on-the-job training and related classroom instruction.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$ 9.02	$ 8.56	$4.00	$20.15	$7.00	$10.67
Most Experienced	10.83	10.68	5.00	20.15	8.79	12.30
Typical	9.28	8.79	4.50	18.15	7.84	10.50
Entry Level	6.99	7.00	4.00	13.00	5.48	8.09

STATEWIDE

SHEET METAL WORKERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	4.2	8.9	8.9	14.9	17.3	10.3	14.0	7.5	5.1	3.3	5.6	214
500+	0.0	0.0	7.3	10.7	21.4	21.4	21.4	10.7	0.0	7.1	0.0	28
250-499	0.0	2.9	0.0	8.8	26.5	11.8	20.6	23.5	5.9	0.0	0.0	34
100-249	5.7	11.4	11.4	25.7	11.4	8.6	11.4	2.9	2.9	2.9	5.7	35
0-99	6.0	12.0	11.1	14.5	15.4	7.7	11.1	3.4	6.8	3.4	8.6	117
MOST EXPERIENCED WORKERS												
ALL	0.0	1.4	1.5	11.6	13.0	10.1	17.4	14.5	11.6	7.3	11.6	69
500+	0.0	0.0	0.0	0.0	11.1	11.1	22.2	33.4	0.0	22.2	0.0	9
250-499	0.0	0.0	0.0	0.0	9.1	9.1	36.3	27.3	18.2	0.0	0.0	11
100-249	0.0	0.0	0.0	27.2	9.1	18.2	9.1	9.1	0.0	9.1	18.2	11
0-99	0.0	2.6	2.6	13.1	15.8	7.9	13.2	7.9	15.8	5.3	15.8	38
TYPICAL WORKERS												
ALL	1.1	4.1	8.1	12.2	25.7	12.2	20.3	5.4	4.1	1.4	5.4	74
500+	0.0	0.0	0.0	0.0	40.0	20.0	40.0	0.0	0.0	0.0	0.0	10
250-499	0.0	0.0	0.0	0.0	41.6	16.7	16.7	25.0	0.0	0.0	0.0	12
100-249	0.0	8.3	16.7	25.0	16.7	8.3	16.7	0.0	8.3	0.0	0.0	12
0-99	2.5	5.0	10.0	15.0	20.0	10.0	17.5	2.5	5.0	2.5	10.0	40
ENTRY LEVEL WORKERS												
ALL	11.3	21.1	16.9	21.1	12.7	8.5	4.2	2.8	0.0	1.4	0.0	71
500+	0.0	0.0	22.2	33.4	11.1	33.3	0.0	0.0	0.0	0.0	0.0	9
250-499	0.0	9.1	0.0	27.2	27.3	9.1	9.1	18.2	0.0	0.0	0.0	11
100-249	16.7	25.0	16.7	25.0	8.3	0.0	8.3	0.0	0.0	0.0	0.0	12
0-99	15.4	28.2	20.5	15.4	10.2	5.1	2.6	0.0	0.0	2.6	0.0	39

STOCK CLERKS - STOCKROOM, WAREHOUSE, AND STORAGE YARD

Nature of the Work:

STOCK CLERKS control the flow of supplies in and out of stock rooms, warehouses, and storage yards. They receive, unpack, and store incoming merchandise or material. When necessary, they report damaged or spoiled goods. They also issue equipment and supplies; keep track of the number of items in storage; and reorder items that are in short supply. On outgoing orders, they may check the items for quality and quantity and sometimes make minor repairs or adjustments. Stock clerks also organize and mark items with identifying codes or prices so that inventories can be located quickly and easily. Sometimes they label, pack, or address goods for delivery.

Training Requirements:

Although there are no specific educational requirements for beginning stock clerks, employers prefer high school graduates. Reading and writing skills and a basic knowledge of mathematics are necessary; typing and filing abilities are also useful. Good health, especially good eyesight, is important. Those who handle jewelry, liquor, or drugs must be bonded.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$270.34	$260.00	$134.00	$596.00	$220.00	$312.00
Most Experienced	311.68	300.00	170.00	596.00	268.00	352.80
Typical	272.11	260.00	151.20	489.00	234.00	302.40
Entry Level	229.22	216.35	134.00	458.00	190.00	260.00

STATEWIDE

STOCK CLERKS - STOCKROOM, WAREHOUSE, AND STORAGE YARD

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	13.6	14.9	13.9	13.7	10.5	12.9	6.2	5.1	3.8	3.6	1.8	870
500+	7.5	11.2	14.0	12.1	10.3	17.8	5.6	7.5	7.5	5.6	0.9	107
250-499	15.5	16.5	10.7	10.7	14.6	11.6	3.9	2.9	8.7	4.9	0.0	103
100-249	11.4	13.5	11.8	16.0	8.5	13.9	8.9	5.9	2.5	3.8	3.8	237
0-99	15.8	16.3	15.8	13.5	10.6	11.4	5.4	4.5	2.4	2.6	1.7	423
						MOST EXPERIENCED WORKERS						
ALL	2.2	5.2	11.0	11.0	14.3	18.4	10.7	10.7	5.5	7.0	4.0	272
500+	2.8	2.9	2.9	11.4	5.7	17.1	14.3	20.0	11.4	8.6	2.9	35
250-499	3.0	6.1	12.1	0.0	27.3	18.2	3.0	6.1	15.1	9.1	0.0	33
100-249	1.3	2.6	10.7	12.0	8.0	22.7	18.7	5.3	2.7	8.0	8.0	75
0-99	2.3	7.0	13.2	13.2	17.0	16.3	7.0	12.4	3.1	5.4	3.1	129
						TYPICAL WORKERS						
ALL	7.2	13.4	18.6	17.6	14.1	11.4	6.5	3.3	3.3	3.3	1.3	306
500+	2.7	11.4	14.3	14.3	17.1	22.9	2.9	2.9	2.9	8.6	0.0	35
250-499	5.7	17.1	17.1	20.0	14.3	5.7	8.6	2.9	5.7	2.9	0.0	35
100-249	5.9	10.6	15.3	20.0	14.1	11.8	4.7	8.2	3.5	3.5	2.4	85
0-99	9.3	14.6	21.6	16.6	13.3	9.9	8.0	0.7	2.7	2.0	1.3	151
						ENTRY LEVEL WORKERS						
ALL	30.8	25.7	11.6	12.0	3.1	9.3	1.7	1.7	2.7	0.7	0.7	292
500+	16.3	18.9	24.3	10.8	8.1	13.5	0.0	0.0	8.1	0.0	0.0	37
250-499	37.1	25.7	2.9	11.4	2.9	11.4	0.0	0.0	5.7	2.9	0.0	35
100-249	27.2	27.3	9.1	15.6	2.6	7.8	3.9	3.9	1.3	0.0	1.3	77
0-99	34.9	26.6	11.9	10.5	2.1	8.4	1.4	1.4	1.4	0.7	0.7	143

SUPERVISORS - PRODUCTION AND OPERATING WORKERS

Nature of the Work:

PRODUCTION AND OPERATION SUPERVISORS directly supervise and coordinate the activities of production and operating personnel, such as testers, precision workers, and assemblers. They inform other employees what work has to be done and make sure the work is done correctly. Because they are responsible for the output of other workers, supervisors make work schedules and keep production and employee records. They plan employees' activities and must allow for unforeseen problems such as absent workers and machine breakdowns.

Training Requirements:

When choosing supervisors, employers generally look for experience, skill, and leadership qualities. Employers place emphasis on the ability to motivate employees, maintain high morale, command respect, and get along with people. Completion of high school often is the minimum educational requirement, and one or two years of college or technical school can be very helpful to workers who want to become supervisors.

About three of every four supervisors rise through the ranks - that is, they are promoted from jobs where they operated a machine, worked on an assembly line, or at a construction craft.

Although few blue-collar worker supervisors are college graduates, a growing number of employers are hiring trainees with a college or technical school background.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$10.86	$10.00	$3.50	$26.00	$8.00	$12.80
Most Experienced	12.51	12.28	5.40	26.00	9.95	15.00
Typical	10.64	10.50	4.20	25.00	8.25	12.50
Entry Level	8.66	8.65	3.50	18.75	7.00	10.00

STATEWIDE

SUPERVISORS - PRODUCTION AND OPERATING WORKERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	1.4	4.8	6.9	9.4	11.5	10.2	12.3	9.1	10.5	5.6	18.3	1673
500+	1.0	1.0	2.0	0.0	8.0	11.0	12.0	9.0	16.0	8.0	32.0	100
250-499	0.0	1.9	0.9	4.7	7.5	14.2	14.2	13.2	11.3	7.6	24.5	106
100-249	1.2	3.2	6.1	7.8	11.2	9.5	12.4	11.5	11.2	6.6	19.3	347
0-99	1.6	6.2	8.1	11.2	12.2	9.9	12.1	8.0	9.6	4.9	16.2	1120
						MOST EXPERIENCED WORKERS						
ALL	0.0	0.9	3.8	6.4	6.4	8.7	9.9	8.2	13.5	7.5	34.7	576
500+	0.0	0.0	3.0	0.0	0.0	0.0	6.1	3.0	12.1	6.1	69.7	33
250-499	0.0	0.0	2.8	0.0	0.0	5.7	8.6	14.3	11.4	2.9	54.3	35
100-249	0.0	1.0	3.3	3.3	5.8	8.3	4.2	10.0	15.8	10.8	37.5	120
0-99	0.0	1.0	4.1	8.5	7.7	9.8	12.1	7.5	13.2	7.0	29.1	388
						TYPICAL WORKERS						
ALL	0.5	3.2	7.2	9.8	10.8	9.1	13.0	12.7	11.6	7.0	15.1	584
500+	0.0	3.0	0.0	0.0	3.0	6.1	12.1	12.1	21.2	15.2	27.3	33
250-499	0.0	2.8	0.0	2.8	2.8	13.9	11.1	16.6	19.4	16.7	13.9	36
100-249	0.8	0.8	5.0	11.7	9.2	6.7	15.8	16.7	12.5	5.8	15.0	120
0-99	0.5	4.1	9.1	10.6	12.7	9.6	12.4	11.1	9.9	5.8	14.2	395
						ENTRY LEVEL WORKERS						
ALL	3.9	11.5	9.9	12.3	17.9	13.1	14.2	6.0	5.7	2.0	3.5	513
500+	2.9	0.0	2.9	0.0	20.6	26.5	17.7	11.8	14.7	2.9	0.0	34
250-499	0.0	2.7	0.0	11.4	20.0	22.9	22.9	8.6	2.9	2.9	5.7	35
100-249	2.8	8.4	10.3	8.4	19.6	14.0	17.8	7.5	4.7	2.8	3.7	107
0-99	4.7	14.5	11.6	14.8	16.9	10.4	11.9	4.8	5.3	1.5	3.6	337

SUPERVISORS AND MANAGER/SUPERVISORS - CLERICAL ADMINISTRATIVE SUPPORT

Nature of the Work:

CLERICAL AND ADMINISTRATIVE SUPPORT SUPERVISORS AND MANAGER/SUPERVISORS are responsible for the direct supervision and coordination of activities of the clerical and/or administrative support workers. The work involves analyzing and organizing office operations and procedures such as typing, bookkeeping, preparation of payrolls, flow of correspondence, filing requisition of supplies, and other clerical services. Evaluating office production, revising procedures, or devising new forms to improve efficiency of the work flow are all major responsibilities. Manager/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work. In addition, Manager/Supervisors may also engage, in part, in the same clerical work as the workers they supervise.

Training Requirements:

Jobs such as these require technical expertise or a thorough understanding of a particular procedure or operation. Experience is the most important consideration in selecting managers. Because the nature of the work varies, so does the level of education required. Some managers may need a master's degree. Others, such as those in personnel work, may require a bachelor's degree for entry level jobs.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$398.75	$385.00	$125.00	$949.00	$300.00	$475.00
Most Experienced	466.71	450.00	208.00	949.00	375.00	538.46
Typical	399.06	392.00	128.00	889.00	315.00	462.00
Entry Level	322.49	300.00	125.00	725.00	250.00	384.62

STATEWIDE

SUPERVISORS AND MANAGER/SUPERVISORS - CLERICAL ADMINISTRATIVE SUPPORT

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	0.7	3.6	2.7	6.5	6.5	10.5	7.9	7.4	7.4	11.5	35.3	998
500+	0.0	1.6	0.0	1.6	1.6	4.9	4.8	9.7	3.2	8.1	64.5	62
250-499	0.0	0.0	1.5	4.6	7.7	4.6	13.9	3.1	12.3	4.6	47.7	65
100-249	0.0	0.8	0.4	5.0	3.4	9.3	7.6	8.9	7.6	14.8	42.2	237
0-99	1.1	5.2	3.9	7.7	8.0	12.0	7.7	7.1	7.3	11.4	28.6	634
MOST EXPERIENCED WORKERS												
ALL	0.0	0.3	0.9	1.5	2.3	6.1	6.1	7.0	7.0	11.1	57.7	342
500+	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	80.0	20
250-499	0.0	0.0	0.0	0.0	0.0	4.4	9.1	4.6	4.6	4.6	72.7	22
100-249	0.0	0.0	0.0	1.2	1.2	2.5	2.5	5.0	4.9	11.1	71.6	81
0-99	0.0	0.5	1.4	1.8	3.2	8.2	7.3	8.2	8.2	12.3	48.9	219
TYPICAL WORKERS												
ALL	0.3	0.3	1.7	6.9	7.2	12.3	7.2	8.0	6.9	15.4	33.8	349
500+	0.0	0.0	0.0	4.8	0.0	4.8	0.0	18.9	4.8	0.0	66.7	21
250-499	0.0	0.0	0.0	0.0	14.3	4.7	14.3	0.0	0.0	4.8	61.9	21
100-249	0.0	0.0	0.0	2.4	3.6	10.9	3.6	9.6	7.2	25.3	37.4	83
0-99	0.4	0.4	2.7	9.4	8.5	14.3	8.5	7.2	7.6	14.3	26.7	224
ENTRY LEVEL WORKERS												
ALL	1.8	11.1	5.9	11.7	10.4	13.0	10.8	7.2	8.5	7.5	12.1	307
500+	0.0	4.8	0.0	0.0	4.8	9.5	9.5	4.8	0.0	19.0	47.6	21
250-499	0.0	0.0	4.4	13.6	9.1	4.6	18.2	4.6	31.8	4.6	9.1	22
100-249	0.0	2.7	1.4	12.3	5.5	15.1	17.8	12.3	11.0	6.8	15.1	73
0-99	3.1	16.2	8.4	12.6	13.1	13.6	7.3	5.8	5.8	6.8	7.3	191

SUPERVISORS AND MANAGERS - SERVICES

Nature of the Work:

SERVICE SUPERVISORS AND MANAGERS are responsible for the direct supervision, planning, organizing, and coordinating of activities of workers who provide various services. Manager/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work. In addition, Manager/Supervisors may also engage, in part, in the same work as the workers they supervise.

Training Requirements:

Jobs such as these require technical expertise or a thorough understanding of a particular procedure or operation. Experience is the most important consideration in selecting managers. Because the nature of the work varies, however, so does the level of education required. Some managers may need a master's degree. Others. such as those in personnel work, may require a bachelor's degree for entry level jobs.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$11.17	$10.58	$4.35	$29.33	$ 8.65	$13.00
Most Experienced	12.97	12.50	4.95	29.33	10.00	15.00
Typical	11.14	11.00	4.63	25.00	8.89	12.93
Entry Level	9.21	9.00	4.50	20.67	7.50	10.28

STATEWIDE

SUPERVISORS AND MANAGERS - SERVICE

HOURLY WAGES

COMPANY SIZE	UNDER $7.00	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 $14.99	$15.00 $15.99	$16.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	6.1	9.6	13.0	12.3	11.8	10.3	10.6	7.2	6.3	3.4	9.4	416
500+	0.0	3.6	0.0	5.3	14.3	12.5	10.7	12.5	16.1	5.4	19.6	56
250-499	3.9	9.8	13.7	13.7	5.9	9.8	11.8	11.8	7.8	2.0	9.8	51
100-249	9.9	11.0	12.1	12.1	15.3	7.7	12.1	4.4	3.3	2.2	9.9	91
0-99	6.9	10.5	16.5	13.8	11.0	11.0	9.6	6.0	4.6	3.7	6.4	218
						MOST EXPERIENCED WORKERS						
ALL	1.4	4.2	9.0	7.8	9.0	11.1	12.5	9.0	9.0	7.6	19.4	144
500+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	16.7	16.7	55.5	18
250-499	0.0	5.9	17.4	0.0	0.0	0.0	17.7	17.7	17.7	5.9	17.7	17
100-249	0.0	6.3	9.7	9.7	9.7	9.7	22.6	6.5	6.5	3.2	16.1	31
0-99	2.6	3.7	9.0	10.3	12.8	16.7	10.3	7.7	6.4	7.7	12.8	78
						TYPICAL WORKERS						
ALL	5.7	9.2	11.3	10.6	12.8	12.8	13.5	7.8	7.1	2.1	7.1	141
500+	0.0	0.0	0.0	0.0	0.0	16.7	22.2	22.2	33.3	0.0	5.6	18
250-499	5.3	11.1	11.1	5.6	5.6	16.7	16.7	16.7	5.6	0.0	5.6	18
100-249	9.1	12.1	6.1	12.1	21.2	12.1	12.1	0.0	0.0	3.1	12.1	33
0-99	5.4	9.7	16.7	13.9	13.9	11.1	11.1	5.6	4.2	2.8	5.6	72
						ENTRY LEVEL WORKERS						
ALL	12.2	16.0	19.1	19.1	13.7	6.9	5.3	4.6	2.3	0.0	0.8	131
500+	0.0	10.0	0.0	15.0	40.0	20.0	10.0	5.0	0.0	0.0	0.0	20
250-499	6.3	12.4	12.5	37.5	12.5	12.5	0.0	0.0	0.0	0.0	6.3	16
100-249	22.3	14.8	22.2	14.8	14.8	0.0	0.0	7.4	3.7	0.0	0.0	27
0-99	13.2	19.1	25.0	17.7	5.9	4.4	7.4	4.4	2.9	0.0	0.0	68

SWITCHBOARD OPERATORS

Nature of the Work:

SWITCHBOARD OPERATORS operate cord or cordless switchboards to relay incoming, outgoing, and inter-office calls. On cordless switchboards, they push switch keys to make connections and relay calls. On the cord type equipment, they plug cords into switchboard jacks. These operators may supply information to callers and record messages, and they may perform clerical duties, such as typing, proofreading, and sorting mail.

Training Requirements:

Generally, high school diplomas are required. Persons interested in becoming switchboard operators should like to serve the public, be pleasant, courteous, and patient, and not mind sitting for long periods of time. A clear, pleasant voice and good hearing are important. In addition to being good listeners, prospective operators should have good reading, spelling, and arithmetic ability. Good eye-hand coordination and manual dexterity are useful. Classroom instruction is sometimes offered in addition to on-the-job training.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$249.25	$245.19	$140.00	$399.00	$217.60	$280.00
Most Experienced	285.04	283.00	173.00	399.00	260.00	316.00
Typical	250.14	250.00	150.00	381.81	228.00	273.00
Entry Level	214.69	215.00	140.00	369.04	197.60	231.00

STATEWIDE

SWITCHBOARD OPERATORS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	11.9	21.8	18.0	19.3	12.8	8.1	4.5	2.0	1.6	0.0	0.0	445
500+	2.1	19.4	17.2	20.4	14.0	9.7	10.8	3.2	3.2	0.0	0.0	93
250-499	18.0	21.0	17.0	17.0	14.0	7.0	4.0	0.0	2.0	0.0	0.0	100
100-249	10.2	22.9	19.9	20.5	12.7	8.4	3.6	1.2	0.6	0.0	0.0	166
0-99	18.6	23.3	16.3	18.6	10.5	7.0	0.0	4.5	1.2	0.0	0.0	86
						MOST EXPERIENCED WORKERS						
ALL	2.8	5.7	11.1	19.2	21.3	19.2	12.1	5.0	3.6	0.0	0.0	141
500+	0.0	0.0	3.4	13.3	13.3	23.3	33.3	6.7	6.7	0.0	0.0	30
250-499	9.1	6.0	12.1	18.2	21.2	18.2	9.1	0.0	6.1	0.0	0.0	33
100-249	0.0	7.5	13.2	22.6	24.5	18.9	7.6	3.8	1.9	0.0	0.0	53
0-99	4.0	8.0	16.0	20.0	24.0	16.0	0.0	12.0	0.0	0.0	0.0	25
						TYPICAL WORKERS						
ALL	5.2	18.8	23.4	28.6	15.6	5.2	1.9	0.0	1.3	0.0	0.0	154
500+	0.0	9.7	16.1	35.5	29.0	6.5	0.0	0.0	3.2	0.0	0.0	31
250-499	6.1	27.3	18.2	24.2	18.2	3.0	3.0	0.0	0.0	0.0	0.0	33
100-249	5.1	15.2	30.5	30.5	10.2	5.1	3.4	0.0	0.0	0.0	0.0	59
0-99	9.7	25.8	22.6	22.6	9.7	6.4	0.0	0.0	3.2	0.0	0.0	31
						ENTRY LEVEL WORKERS						
ALL	27.3	40.0	18.7	10.0	2.0	0.7	0.0	1.3	0.0	0.0	0.0	150
500+	6.2	46.9	31.3	12.5	0.0	0.0	0.0	3.1	0.0	0.0	0.0	32
250-499	38.3	29.4	20.6	8.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0	34
100-249	25.9	46.3	14.8	7.4	3.7	1.9	0.0	0.0	0.0	0.0	0.0	54
0-99	40.0	33.4	10.0	13.3	0.0	0.0	0.0	3.3	0.0	0.0	0.0	30

SYSTEMS ANALYSTS

Nature of the Work:

SYSTEMS ANALYSTS plan efficient methods for processing data to solve problems ranging from monitoring nuclear fission in a power plant to forecasting sales for an appliance manufacturing firm. Using techniques such as cost accounting, sampling, and mathematical model building, systems analysts study the problem they have been asked to solve. They determine what data must be collected, the equipment needed for computation, and the steps to be followed in processing the information. Finally, they translate the designed system into a series of logically ordered tasks that can be handled by a computer.

Training Requirements:

College graduates generally are sought for jobs as systems analysts, and for some of the more complex jobs, persons with graduate degrees are preferred. Employers usually want analysts with a background in accounting, business management, or economics for work in a business environment, however, a background in the physical sciences, mathematics, or engineering is preferred for work in scientifically oriented organizations. Many employers seek applicants who have degrees in computer science, information systems, or data processing. Regardless of college major, employers look for people who are familiar with programming languages. Courses in computer concepts, systems analysis, and data base management systems offer good preparation for a job in this field.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$31,661	$30,300	$15,000	$67,000	$25,100	$36,700
Most Experienced	38,482	38,000	23,600	67,000	32,000	43,456
Typical	31,487	31,200	20,000	47,280	26,976	35,000
Entry Level	25,235	25,000	15,000	40,000	22,000	29,000

STATEWIDE

SYSTEMS ANALYSTS

ANNUAL WAGES

COMPANY SIZE	UNDER $15,000	$15,000 $17,499	$17,500 $19,999	$20,000 $22,499	$22,500 $24,999	$25,000 $27,499	$27,500 $29,999	$30,000 $32,499	$32,500 $34,999	$35,000 $37,499	$37,500 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	0.0	1.8	1.8	7.5	7.1	16.4	9.3	15.4	8.2	10.4	22.1	280
500+	0.0	0.0	0.0	6.6	10.5	13.2	10.5	11.9	11.8	11.8	23.7	76
250-499	0.0	1.5	1.5	8.8	8.8	19.1	7.3	17.7	8.8	5.9	20.6	68
100-249	0.0	2.4	4.8	6.0	4.8	13.2	12.1	19.3	4.8	13.3	19.3	83
0-99	0.0	3.8	0.0	9.4	3.8	22.6	5.7	11.3	7.6	9.4	26.4	53
MOST EXPERIENCED WORKERS												
ALL	0.0	0.0	0.0	0.0	1.1	3.3	4.4	17.6	8.8	12.1	52.7	91
500+	0.0	0.0	0.0	0.0	0.0	0.0	4.2	8.3	8.3	16.7	62.5	24
250-499	0.0	0.0	0.0	0.0	0.0	9.1	0.0	27.3	9.1	4.5	50.0	22
100-249	0.0	0.0	0.0	0.0	3.7	0.0	7.4	22.2	3.7	18.5	44.5	27
0-99	0.0	0.0	0.0	0.0	0.0	5.4	5.6	11.1	16.7	5.6	55.6	18
TYPICAL WORKERS												
ALL	0.0	0.0	0.0	5.3	4.2	18.9	10.5	19.0	12.6	15.8	13.7	95
500+	0.0	0.0	0.0	0.0	7.7	11.6	11.5	23.1	15.4	19.2	11.5	26
250-499	0.0	0.0	0.0	0.0	8.7	21.8	13.0	17.4	17.4	8.7	13.0	23
100-249	0.0	0.0	0.0	10.5	0.0	20.7	10.3	17.2	10.3	17.2	13.8	29
0-99	0.0	0.0	0.0	11.8	0.0	23.5	5.9	17.5	5.9	17.7	17.7	17
ENTRY LEVEL WORKERS												
ALL	0.0	5.3	5.3	17.0	15.9	26.6	12.8	9.6	3.2	3.2	1.1	94
500+	0.0	0.0	0.0	19.2	23.1	26.9	15.4	3.9	11.5	0.0	0.0	26
250-499	0.0	4.2	4.4	26.1	17.4	26.1	8.7	8.7	0.0	4.4	0.0	23
100-249	0.0	7.4	14.8	7.4	11.1	18.6	18.5	18.5	0.0	3.7	0.0	27
0-99	0.0	11.1	0.0	16.7	11.1	38.9	5.4	5.6	0.0	5.6	5.6	18

TOOL AND DIE MAKERS

Nature of the Work:

TOOLMAKERS AND DIEMAKERS are highly skilled workers who produce tools and special guiding and holding devices that are used to mass-produce a variety of machined metal parts. Toolmakers produce jigs and fixtures (devices that hold metal while it is bored, stamped, or drilled). They also make gauges and other measuring devices used in manufacturing precision metal parts. Diemakers construct metal forms (dies) to shape metal in stamping and forging operations. They also make metal molds for die casting and for molding plastics. Toolmakers and diemakers also repair worn or damaged dies, gauges, jigs, and fixtures and help design tools and dies.

Training Requirements:

A formal apprenticeship program is the best way to learn tool and die making. In selecting apprentices, most employers prefer persons with a high school or vocational school education. Courses in shop math, physics, drafting, blueprint reading, and metalworking may help applicants to land an apprentice position. Experience operating machine tools also can be helpful. A test may be required of applicants to determine their mechanical aptitude and their mathematical ability.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$10.43	$10.24	$3.65	$20.00	$ 8.81	$12.00
Most Experienced	12.20	12.00	6.25	20.00	10.34	13.50
Typical	10.51	10.33	5.00	19.23	9.00	11.75
Entry Level	8.45	8.70	3.65	13.75	7.00	10.00

STATEWIDE

TOOL AND DIE MAKERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	1.3	2.7	5.4	6.2	10.6	13.9	18.4	14.1	11.8	7.5	8.1	483
500+	0.0	0.0	1.6	1.6	9.5	15.9	23.8	17.4	14.3	11.1	4.8	63
250-499	0.0	1.7	3.5	5.2	10.4	17.2	24.1	19.0	10.3	6.9	1.7	58
100-249	2.1	2.0	6.1	10.2	12.2	16.3	13.3	13.3	13.3	6.1	5.1	98
0-99	1.9	3.8	6.4	6.1	10.2	11.7	17.8	12.5	11.0	7.2	11.4	264
MOST EXPERIENCED WORKERS												
ALL	0.0	0.0	1.2	0.6	5.0	6.8	16.7	16.7	19.1	14.8	19.1	162
500+	0.0	0.0	0.0	0.0	0.0	0.0	28.6	14.3	19.0	23.8	14.3	21
250-499	0.0	0.0	0.0	0.0	5.3	10.5	20.9	21.1	21.1	15.8	5.3	19
100-249	0.0	0.0	3.1	0.0	9.4	9.4	9.4	25.0	18.7	12.5	12.5	32
0-99	0.0	0.0	1.1	1.1	4.4	6.7	15.6	13.3	18.9	13.3	25.6	90
TYPICAL WORKERS												
ALL	0.0	0.6	2.4	7.1	11.8	14.2	23.1	18.9	11.3	5.9	4.7	169
500+	0.0	0.0	0.0	0.0	9.5	14.3	19.0	28.6	19.1	9.5	0.0	21
250-499	0.0	0.0	5.0	0.0	10.0	15.0	30.0	30.0	5.0	5.0	0.0	20
100-249	0.0	0.0	0.0	11.8	20.6	14.7	23.5	8.8	11.8	5.9	2.9	34
0-99	0.0	1.1	3.2	8.5	9.6	13.8	22.3	18.1	10.6	5.3	7.5	94
ENTRY LEVEL WORKERS												
ALL	4.6	7.9	13.2	11.2	15.1	21.1	15.1	5.9	4.6	1.3	0.0	152
500+	0.0	0.0	4.8	4.8	19.0	33.3	23.8	9.5	4.8	0.0	0.0	21
250-499	0.0	5.1	5.3	15.8	15.8	26.3	21.1	5.3	5.3	0.0	0.0	19
100-249	6.0	6.3	15.6	18.8	6.3	25.0	6.3	6.3	9.4	0.0	0.0	32
0-99	6.1	11.3	16.3	8.8	17.5	15.0	15.0	5.0	2.5	2.5	0.0	80

TRAFFIC, SHIPPING, AND RECEIVING CLERKS

Nature of the Work:

TRAFFIC, SHIPPING, AND RECEIVING CLERKS keep track of goods transferred between businesses and their customers and suppliers. Shipping clerks are responsible for all shipments leaving a business place. Before goods are sent to a customer, these clerks check to be sure the order has been filled correctly, then wrap or pack it, address it, and finally, compute the freight or postal rate for the package. It is the responsibility of the traffic clerk to arrange for the transportation of the product.

When shipments arrive, receiving clerks perform tasks similar to those of shipping clerks. They determine whether their employer's orders have been correctly filled by verifying incoming shipments against the original order and the accompanying bill of lading or invoice. They record the shipment and the conditions of its contents. The job may also include routing or moving shipments to the proper department, warehouse section, or stockroom and providing information that is needed to compute the inventory.

Training Requirements:

High school graduates are preferred for beginning jobs in shipping and receiving departments. Business arithmetic, typing, and other high school subjects are helpful. The ability to write legibly and keep orderly records is important. Dependability and an interest in learning about the firm's products and business activities are other qualities that employers seek. In addition, traffic, shipping, and receiving clerks should be able to work under close supervision at repetitive tasks.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$283.01	$275.00	$120.00	$685.00	$228.00	$326.92
Most Experienced	331.39	320.00	154.00	685.00	278.00	372.00
Typical	283.42	275.00	142.00	615.38	240.00	320.00
Entry Level	234.32	222.80	120.00	576.92	192.31	265.00

STATEWIDE

TRAFFIC, SHIPPING, AND RECEIVING CLERKS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	11.7	12.8	12.5	13.0	10.9	12.9	7.8	5.8	4.2	3.2	5.2	1235
500+	6.7	12.6	16.0	13.5	9.2	12.6	8.4	5.9	8.4	4.2	2.5	119
250-499	8.8	15.2	12.0	15.2	17.6	12.8	8.8	1.6	3.2	1.6	3.2	125
100-249	9.5	10.2	12.3	13.3	11.9	14.4	10.2	6.3	3.8	2.5	5.6	285
0-99	14.0	13.5	12.1	12.3	9.6	12.3	6.5	6.4	3.8	3.7	5.8	706
						MOST EXPERIENCED WORKERS						
ALL	2.2	4.0	7.4	9.9	11.2	17.1	12.7	10.7	7.7	6.4	10.7	403
500+	0.0	2.5	10.0	12.5	2.5	20.0	15.0	12.5	12.5	7.5	5.0	40
250-499	0.0	7.3	4.9	12.2	17.0	24.4	14.6	4.9	4.9	4.9	4.9	41
100-249	2.2	3.3	7.6	8.7	6.5	18.5	18.5	8.7	9.8	4.2	12.0	92
0-99	3.0	3.9	7.4	9.5	13.5	14.8	9.6	12.2	6.5	7.4	12.2	230
						TYPICAL WORKERS						
ALL	6.5	10.5	14.3	17.8	13.3	14.7	8.6	4.7	3.3	2.6	3.7	428
500+	0.0	13.1	13.2	23.7	15.8	10.5	5.3	5.3	7.9	2.6	2.6	38
250-499	2.4	14.3	11.9	19.0	28.6	7.1	11.9	0.0	2.4	0.0	2.4	42
100-249	7.9	7.9	8.9	16.8	14.9	17.8	9.9	7.9	2.0	2.0	4.0	101
0-99	7.7	10.5	17.0	17.0	9.7	15.4	8.1	4.1	3.2	3.2	4.1	247
						ENTRY LEVEL WORKERS						
ALL	26.7	24.0	15.6	10.9	8.2	6.7	2.0	2.2	1.7	0.8	1.2	404
500+	19.5	21.9	24.4	4.9	9.8	7.3	4.9	0.0	4.9	2.4	0.0	41
250-499	23.8	23.8	19.1	14.3	7.1	7.1	0.0	0.0	2.4	0.0	2.4	42
100-249	18.5	19.6	20.6	14.1	14.1	6.5	2.2	2.2	0.0	1.1	1.1	92
0-99	31.9	26.2	11.4	10.0	5.7	6.6	1.8	2.9	1.8	0.4	1.3	229

TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER

Nature of the Work:

HEAVY TRUCK DRIVERS drive tractor-trailer combinations or trucks with a capacity of more than three tons to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. The distances traveled by these drivers can vary dramatically. They can be just a few miles to a nearby city, or they can be hundreds of miles away in which case the trip may last a few days or even weeks. When they do reach their destinations they may be required to assist in unloading the truck.

Training Requirements:

In most states, drivers must have a chauffeur's license, which is a commercial driving permit. Most employers prefer high school graduates. Long distance drivers should be at least 21 years old, able bodied, and have good vision. Drivers should also be able to communicate in English and have good driving records.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.51	$8.00	$4.00	$19.23	$7.00	$10.00
Most Experienced	9.61	9.06	5.83	19.23	8.00	10.90
Typical	8.49	8.00	5.00	16.82	7.00	10.00
Entry Level	7.42	7.00	4.00	14.42	6.00	8.50

STATEWIDE

TRUCK DRIVERS, HEAVY AND TRACTOR TRAILER

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	2.3	7.5	15.4	19.2	16.4	12.9	11.7	6.5	3.2	2.2	2.7	402
500+	2.4	2.4	7.1	19.1	26.2	9.5	26.2	7.1	0.0	0.0	0.0	42
250-499	0.0	12.9	9.7	22.6	9.7	6.4	12.9	12.9	6.5	3.2	3.2	31
100-249	3.0	3.0	8.9	14.9	13.4	19.4	17.9	7.5	6.0	3.0	3.0	67
0-99	2.3	8.8	19.1	19.8	16.4	12.6	7.6	5.3	2.7	2.3	3.1	262
MOST EXPERIENCED WORKERS												
ALL	0.0	0.8	6.8	12.1	22.7	17.4	15.2	11.4	5.3	3.0	5.3	132
500+	0.0	0.0	7.2	7.1	28.6	7.1	28.6	21.4	0.0	0.0	0.0	14
250-499	0.0	10.0	0.0	20.0	0.0	10.0	20.0	20.0	10.0	0.0	10.0	10
100-249	0.0	0.0	4.5	9.1	9.1	22.7	22.7	13.6	9.1	4.6	4.6	22
0-99	0.0	0.0	8.1	12.8	27.9	18.6	10.5	8.1	4.7	3.5	5.8	86
TYPICAL WORKERS												
ALL	0.0	5.8	17.4	23.9	15.2	12.3	13.8	5.1	1.4	2.9	2.2	138
500+	0.0	0.0	7.2	21.4	21.4	7.1	42.9	0.0	0.0	0.0	0.0	14
250-499	0.0	9.1	9.1	18.2	27.2	0.0	18.2	9.1	0.0	9.1	0.0	11
100-249	0.0	4.2	13.0	17.4	8.7	26.1	13.0	4.4	4.4	4.4	4.4	23
0-99	0.0	6.7	21.1	26.7	14.4	11.1	8.9	5.6	1.1	2.2	2.2	90
ENTRY LEVEL WORKERS												
ALL	6.8	15.9	22.0	21.2	11.3	9.1	6.1	3.0	3.0	0.8	0.8	132
500+	7.2	7.1	7.1	28.6	28.6	14.3	7.1	0.0	0.0	0.0	0.0	14
250-499	0.0	20.0	20.0	30.0	0.0	10.0	0.0	10.0	10.0	0.0	0.0	10
100-249	9.1	4.4	9.1	18.2	22.7	9.1	18.2	4.6	4.6	0.0	0.0	22
0-99	7.0	19.8	27.9	19.8	7.0	8.1	3.5	2.3	2.3	1.1	1.2	86

TRUCK DRIVERS, LIGHT - INCLUDE DELIVERY AND ROUTE WORKERS

Nature of the Work:

LIGHT TRUCK DRIVERS generally carry cargo with a capacity under three tons. They are also known as local truck drivers and are responsible for the initial pick up from factories and the consolidation of this cargo at terminals for intercity shipment, as well as final delivery of goods from terminals to stores and homes in the area. They get delivery forms and check the condition of their trucks daily. At the customer's place of business, drivers generally load or unload the merchandise. They get customers to sign receipts for the goods and may receive money for the material delivered. At the end of the day, they turn in the receipts, money, and records of the deliveries made. They also report whatever repairs the trucks need before being used again.

Training Requirements:

Qualifications for local truck drivers vary considerably, depending upon the type of truck and the nature of the employer's business. In most states however, applicants must have a chauffeur's license, which is a commercial driving permit. Applicants may have to pass a general physical examination, a written examination on driving regulations, and a driving test. They should have good hearing and at least 20/40 vision, with or without glasses, be able to lift heavy objects, and be in good health. Employers prefer applicants with some previous experience driving a truck.

Since drivers often deal directly with the company's customers, the ability to get along well with people is important. Employers also look for responsible, self-motivated individuals, since drivers work with little supervision. Many employers will not hire applicants who have bad driving records.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.05	$7.00	$3.35	$15.00	$5.75	$8.31
Most Experienced	8.16	8.00	4.50	15.00	7.00	9.13
Typical	7.05	6.97	3.50	12.75	6.00	8.01
Entry Level	5.93	5.50	3.35	12.02	5.00	6.95

STATEWIDE

TRUCK DRIVERS, LIGHT - INCLUDE DELIVERY AND ROUTE WORKERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	10.5	18.1	21.2	19.3	13.9	8.3	5.5	1.9	0.8	0.4	0.1	735
500+	2.4	7.1	16.7	23.8	29.8	10.7	8.3	1.2	0.0	0.0	0.0	84
250-499	4.2	13.9	20.8	22.2	16.7	9.7	4.2	6.9	1.4	0.0	0.0	72
100-249	10.1	12.4	16.3	22.5	15.5	13.9	4.7	2.3	2.3	0.0	0.0	129
0-99	13.1	22.5	23.6	17.1	10.0	6.0	5.3	1.1	0.4	0.7	0.2	450
						MOST EXPERIENCED WORKERS						
ALL	2.1	4.2	17.5	25.0	20.4	12.5	10.4	4.6	1.7	1.2	0.4	240
500+	0.0	0.0	7.1	10.7	42.9	21.4	14.3	3.6	0.0	0.0	0.0	28
250-499	0.0	0.0	8.0	36.0	20.0	12.0	12.0	8.0	4.0	0.0	0.0	25
100-249	2.4	2.4	9.8	26.8	17.1	24.4	4.9	7.3	4.9	0.0	0.0	41
0-99	2.7	6.2	23.3	25.3	17.1	7.5	11.0	3.4	0.7	2.1	0.7	146
						TYPICAL WORKERS						
ALL	6.6	17.1	26.8	20.6	14.0	8.6	5.1	0.8	0.4	0.0	0.0	257
500+	0.0	3.6	14.3	35.7	32.1	3.6	10.7	0.0	0.0	0.0	0.0	28
250-499	0.0	8.7	34.8	17.4	17.4	13.0	0.0	8.7	0.0	0.0	0.0	23
100-249	8.5	8.5	23.4	23.4	19.2	10.6	6.4	0.0	0.0	0.0	0.0	47
0-99	8.2	23.3	28.9	17.6	8.8	8.2	4.4	0.0	0.6	0.0	0.0	159
						ENTRY LEVEL WORKERS						
ALL	23.1	33.2	18.9	12.2	7.2	3.8	0.8	0.4	0.4	0.0	0.0	238
500+	7.1	17.9	28.6	25.0	14.3	7.1	0.0	0.0	0.0	0.0	0.0	28
250-499	12.5	33.3	20.8	12.5	12.5	4.2	0.0	4.2	0.0	0.0	0.0	24
100-249	19.5	26.8	14.6	17.1	9.8	7.3	2.5	0.0	2.4	0.0	0.0	41
0-99	29.0	37.9	17.9	8.3	4.1	2.1	0.7	0.0	0.0	0.0	0.0	145

TYPISTS

Nature of the Work:

TYPISTS help maintain the flow of communication in the modern office by making neat, typed copies of handwritten, printed, and recorded words. They may also perform other office tasks, such as answering telephones, filing, and operating copiers, calculators, and other office machines. Experienced typists often do work that requires a high degree of accuracy and independent judgment.

Training Requirements:

Typists generally need a high school diploma. While specific requirements vary, a typing speed of 45 to 55 words per minute is usually required. Familiarity with office practices and equipment is an asset. Formal secretarial training may improve promotional opportunities. Good spelling, punctuation, and grammar are also important skills.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$244.59	$240.00	$140.00	$440.00	$202.00	$275.00
Most Experienced	280.35	277.00	170.00	440.00	250.00	305.00
Typical	244.21	240.00	163.00	375.00	220.00	267.00
Entry Level	209.79	200.00	140.00	365.00	190.00	227.00

STATEWIDE

TYPISTS

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	14.5	22.8	17.9	19.3	9.6	8.5	2.2	3.9	0.9	0.2	0.2	543
500+	10.9	17.4	20.5	15.2	12.0	10.9	3.3	9.8	0.0	0.0	0.0	92
250-499	15.4	16.7	24.2	15.4	15.4	9.0	1.3	1.3	1.3	0.0	0.0	78
100-249	12.8	29.9	15.9	21.7	8.9	7.6	1.9	1.3	0.0	0.0	0.0	157
0-99	17.1	22.2	15.7	20.8	6.9	7.9	2.3	4.2	1.9	0.5	0.5	216
MOST EXPERIENCED WORKERS												
ALL	5.0	6.2	11.7	22.4	18.4	18.4	5.6	8.9	2.2	0.6	0.6	179
500+	0.0	0.0	10.0	20.0	20.0	23.3	10.0	16.7	0.0	0.0	0.0	30
250-499	7.7	3.6	3.9	15.4	42.3	15.4	3.9	3.9	3.9	0.0	0.0	26
100-249	3.9	7.8	17.6	21.6	17.7	21.6	5.9	3.9	0.0	0.0	0.0	51
0-99	6.9	8.3	11.1	26.4	9.7	15.3	4.2	11.1	4.2	1.4	1.4	72
TYPICAL WORKERS												
ALL	6.0	24.7	23.1	28.0	8.2	6.6	1.1	1.7	0.6	0.0	0.0	182
500+	0.0	23.3	26.6	16.7	16.7	10.0	0.0	6.7	0.0	0.0	0.0	30
250-499	7.7	7.7	46.2	26.9	0.0	11.5	0.0	0.0	0.0	0.0	0.0	26
100-249	3.7	37.0	16.7	33.3	7.4	1.9	0.0	0.0	0.0	0.0	0.0	54
0-99	9.7	22.2	18.1	29.2	8.3	6.9	2.8	1.4	1.4	0.0	0.0	72
ENTRY LEVEL WORKERS												
ALL	32.4	37.4	18.7	7.7	2.2	0.5	0.0	1.1	0.0	0.0	0.0	182
500+	31.2	28.1	25.0	9.4	0.0	0.0	0.0	6.3	0.0	0.0	0.0	32
250-499	30.8	38.5	23.1	3.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	26
100-249	30.8	44.2	13.5	9.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0	52
0-99	34.7	36.1	18.1	6.9	2.8	1.4	0.0	0.0	0.0	0.0	0.0	72

TYPISTS, WORD PROCESSING EQUIPMENT

Nature of the Work:

Typists who specialize in using word processing equipment are generally called WORD PROCESSORS. They help maintain the flow of communication in the office by making neat, typed copies of letters, forms, or other straight copy material from rough draft, corrected copy, or voice recording. Other clerical duties may be performed as assigned.

Training Requirements:

Word Processors generally need a high school diploma. Good spelling, punctuation, and grammar are important skills, and familiarity with standard office equipment and procedures is an asset. Most essential is a thorough knowledge of word processing equipment and excellent typing skills including speed and accuracy.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$269.44	$262.00	$150.00	$440.00	$231.00	$303.27
Most Experienced	312.00	308.00	200.00	440.00	277.00	346.15
Typical	268.01	260.00	175.00	378.00	240.00	300.00
Entry Level	229.91	227.00	150.00	365.39	200.00	250.00

STATEWIDE

TYPISTS, WORD PROCESSING EQUIPMENT

WEEKLY WAGES

COMPANY SIZE	UNDER $200.00	$200.00 $224.99	$225.00 $249.99	$250.00 $274.99	$275.00 $299.99	$300.00 $324.99	$325.00 $349.99	$350.00 $374.99	$375.00 $399.99	$400.00 $424.99	$425.00 & OVER	TOTAL RESPONSES
						ALL WORKERS						
ALL	7.7	13.3	16.3	19.4	13.3	13.3	6.2	5.9	3.1	1.2	0.3	324
500+	5.8	13.1	13.0	17.4	11.6	18.8	1.5	13.0	5.8	0.0	0.0	69
250-499	11.5	1.9	25.0	23.1	19.2	13.5	3.9	1.9	0.0	0.0	0.0	52
100-249	6.5	17.4	17.4	18.5	15.2	11.9	7.6	3.3	1.1	1.1	0.0	92
0-99	8.1	15.4	13.5	19.8	9.9	10.8	9.0	5.4	4.5	2.7	0.9	111
						MOST EXPERIENCED WORKERS						
ALL	0.0	1.9	8.6	12.4	15.2	22.9	14.3	12.4	7.6	3.8	0.9	105
500+	0.0	0.0	4.4	13.0	8.7	30.4	4.4	26.1	13.0	0.0	0.0	23
250-499	0.0	0.0	5.9	11.7	35.3	29.4	11.8	5.9	0.0	0.0	0.0	17
100-249	0.0	0.0	13.4	20.0	13.3	20.0	20.0	6.7	3.3	3.3	0.0	30
0-99	0.0	5.7	8.6	5.7	11.4	17.2	17.1	11.4	11.4	8.6	2.9	35
						TYPICAL WORKERS						
ALL	1.8	15.3	14.6	24.6	18.2	16.4	4.6	2.7	1.8	0.0	0.0	110
500+	0.0	13.0	13.0	17.4	21.7	26.1	0.0	4.4	4.4	0.0	0.0	23
250-499	0.0	5.9	35.3	29.4	17.6	11.8	0.0	0.0	0.0	0.0	0.0	17
100-249	3.2	21.9	15.6	15.6	21.9	15.6	3.1	3.1	0.0	0.0	0.0	32
0-99	2.6	15.8	5.3	34.2	13.2	13.2	10.5	2.6	2.6	0.0	0.0	38
						ENTRY LEVEL WORKERS						
ALL	21.1	22.0	25.7	21.1	6.4	0.9	0.0	2.8	0.0	0.0	0.0	109
500+	17.4	26.1	21.7	21.7	4.4	0.0	0.0	8.7	0.0	0.0	0.0	23
250-499	33.3	0.0	33.3	27.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	18
100-249	16.7	30.0	23.3	20.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	30
0-99	21.1	23.7	26.3	18.4	5.3	2.6	0.0	2.6	0.0	0.0	0.0	38

WELDING MACHINE OPERATORS AND TENDERS

Nature of the Work:

WELDING MACHINE OPERATORS AND TENDERS are responsible for operating or tending welding machines that fuse or connect together parts of fabricated metal products and metal components according to blueprint specifications. They control the amount of heat and the size of the melted area and add the proper amount of filler material to form a strong joint.

Training Requirements:

Employers prefer applicants who have high school or vocational school training in welding. Courses in shop mathematics, mechanical drawing, blueprint reading, physics, and chemistry are also helpful. Employees should have the ability to concentrate on detailed work for long periods and be physically able, in order to bend, stoop, and work in awkward positions.

Although it takes several years of on-the-job training to become a skilled welder, less skilled work can be learned in a few months or less. Some welding operators learn to operate a machine in a few hours and can handle all aspects of the job within a week.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$7.92	$7.50	$3.35	$18.00	$6.25	$ 9.30
Most Experienced	9.14	9.00	4.50	18.00	7.00	10.90
Typical	8.01	8.00	3.75	17.75	6.75	9.25
Entry Level	6.69	6.35	3.35	11.15	5.00	7.39

STATEWIDE

WELDING MACHINE OPERATORS AND TENDERS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	9.4	11.4	17.3	16.4	12.3	14.6	6.8	5.5	2.7	1.8	1.8	220
500+	4.4	0.0	13.0	13.0	4.4	39.1	13.0	8.7	0.0	4.4	0.0	23
250-499	0.0	22.2	16.7	5.6	11.1	22.2	0.0	11.1	11.1	0.0	0.0	18
100-249	13.0	21.7	28.3	10.9	8.7	4.3	6.5	2.2	0.0	0.0	4.4	46
0-99	10.5	8.3	14.3	20.3	15.0	12.8	6.8	5.2	3.0	2.3	1.5	133
MOST EXPERIENCED WORKERS												
ALL	2.8	7.1	14.3	11.4	11.4	18.6	10.0	8.6	8.6	2.9	4.3	70
500+	0.0	0.0	12.5	0.0	0.0	37.5	25.0	12.5	0.0	12.5	0.0	8
250-499	0.0	16.7	0.0	16.7	0.0	33.3	0.0	0.0	33.3	0.0	0.0	6
100-249	6.6	13.3	40.0	6.7	0.0	0.0	20.0	6.7	0.0	0.0	6.7	15
0-99	2.4	4.9	7.3	14.6	19.5	19.5	4.9	9.8	9.8	2.4	4.9	41
TYPICAL WORKERS												
ALL	5.2	11.7	11.7	16.9	20.7	16.9	7.8	5.2	0.0	2.6	1.3	77
500+	0.0	0.0	0.0	14.3	14.3	57.1	0.0	14.3	0.0	0.0	0.0	7
250-499	0.0	16.6	16.7	0.0	33.3	16.7	0.0	16.7	0.0	0.0	0.0	6
100-249	6.7	20.0	26.7	13.3	20.0	13.3	0.0	0.0	0.0	0.0	0.0	15
0-99	6.1	10.3	8.2	20.4	20.4	12.2	12.2	4.1	0.0	4.1	2.0	49
ENTRY LEVEL WORKERS												
ALL	20.5	15.1	26.2	20.5	4.1	8.2	2.7	2.7	0.0	0.0	0.0	73
500+	12.5	0.0	25.0	25.0	0.0	25.0	12.5	0.0	0.0	0.0	0.0	8
250-499	0.0	33.3	33.3	0.0	0.0	16.7	0.0	16.7	0.0	0.0	0.0	6
100-249	26.7	33.3	20.0	13.3	6.7	0.0	0.0	0.0	0.0	0.0	0.0	15
0-99	22.7	9.1	27.3	25.0	4.5	6.8	2.3	2.3	0.0	0.0	0.0	44

WELDING MACHINE SETTERS AND SET-UP OPERATORS

Nature of the Work:

WELDING MACHINE SETTERS AND SET-UP OPERATORS set up and/or operate welding machines that join or bond together parts of fabricated metal products and metal components as specified by blueprints, layouts, welding procedures, and operating charts. Welding can be preformed on any flat, cylindrical, or irregular surface or part. Adjustments must be made on the machine by these operators to vary the size, location, and penetration of the bond.

Training Requirements:

Employers do not require a high school diploma. However, they often prefer high school or vocational school graduates who have taken courses in mathematics, machine shop, and blueprint reading. Most workers learn these jobs through on-the-job training provided by their employer. Persons interested in these jobs should have manual dexterity and be mechanically inclined to use the tools and machinery required in their work. Physical stamina and strength are also essential.

Category	Mean 1/	Median 2/	Actual 3/ Low	Actual 4/ High	Intermediate 5/ Range	
All	$8.69	$ 8.61	$3.35	$15.00	$7.11	$10.11
Most Experienced	9.90	10.00	4.50	15.00	8.54	11.35
Typical	8.86	8.79	3.75	13.65	7.77	10.00
Entry Level	7.35	7.24	3.35	11.21	6.00	8.50

STATEWIDE

WELDING MACHINE SETTERS AND SET-UP OPERATORS

HOURLY WAGES

COMPANY SIZE	UNDER $5.00	$5.00 $5.99	$6.00 $6.99	$7.00 $7.99	$8.00 $8.99	$9.00 $9.99	$10.00 $10.99	$11.00 $11.99	$12.00 $12.99	$13.00 $13.99	$14.00 & OVER	TOTAL RESPONSES
ALL WORKERS												
ALL	5.5	6.3	7.2	16.9	19.4	15.2	13.9	6.7	5.5	1.7	1.7	237
500+	3.4	3.5	6.9	10.3	20.7	24.1	6.9	17.2	0.0	3.5	3.5	29
250-499	0.0	3.5	3.5	17.2	24.1	17.2	20.7	6.9	6.9	0.0	0.0	29
100-249	2.0	8.2	10.2	18.4	22.5	8.2	20.4	2.0	6.1	0.0	2.0	49
0-99	8.5	6.9	6.9	17.7	16.9	15.4	11.5	6.2	6.2	2.3	1.5	130
MOST EXPERIENCED WORKERS												
ALL	2.4	2.6	2.6	9.0	16.7	15.4	20.5	9.0	14.1	2.6	5.1	78
500+	0.0	0.0	10.0	10.0	20.0	10.0	10.0	30.0	0.0	0.0	10.0	10
250-499	0.0	0.0	0.0	0.0	20.0	20.0	40.0	0.0	20.0	0.0	0.0	10
100-249	0.0	5.9	6.3	6.3	18.8	6.3	25.0	6.3	18.8	0.0	6.3	16
0-99	4.8	2.4	0.0	11.9	14.3	18.9	16.7	7.1	14.3	4.8	4.8	42
TYPICAL WORKERS												
ALL	2.6	2.5	10.1	13.9	22.8	20.3	15.2	7.6	2.5	2.5	0.0	79
500+	0.0	0.0	11.1	0.0	22.2	33.4	11.1	11.1	0.0	11.1	0.0	9
250-499	0.0	0.0	0.0	11.1	33.4	22.2	22.2	11.1	0.0	0.0	0.0	9
100-249	0.0	0.0	18.7	18.8	25.0	12.5	25.0	0.0	0.0	0.0	0.0	16
0-99	4.5	4.4	8.9	15.6	20.0	20.0	11.1	8.9	4.4	2.2	0.0	45
ENTRY LEVEL WORKERS												
ALL	11.0	13.8	8.8	27.5	18.8	10.0	6.3	3.8	0.0	0.0	0.0	80
500+	10.0	10.0	0.0	20.0	20.0	30.0	0.0	10.0	0.0	0.0	0.0	10
250-499	0.0	10.0	10.0	40.0	20.0	10.0	0.0	10.0	0.0	0.0	0.0	10
100-249	5.9	17.6	5.9	29.4	23.5	5.9	11.8	0.0	0.0	0.0	0.0	17
0-99	16.3	13.9	11.6	25.6	16.3	7.0	7.0	2.3	0.0	0.0	0.0	43